



Digitized by the Internet Archive
in 2014

<https://archive.org/details/b19974760M3276>

The CHEMIST AND DRUGGIST

for RETAILER - WHOLESALE - MANUFACTURER

Established 1859

28 Essex Street, Strand, London, W.C.2

Registered as a Newspaper

No. 3136
VOL. CXXXII

MARCH 16, 1940

Annual Subscription (with
Diary) 20/- Single Copies 9d.

The House of Burgoyne

ESTABLISHED 1741

has carried on
through nine reigns...



GEORGE II



GEORGE III



GEORGE IV



WILLIAM IV



VICTORIA



EDWARD VII



GEORGE V



EDWARD VIII



GEORGE VI

and is still at your service

BURGOYNE BURBIDGES & Co. LTD.
LONDON, E.6

A Profitable Commodity

EUTHYMOL

Because of the security it confers in respect of protected price and assured profit, Euthymol is a sound line from which you can secure good and profitable business. It has been on the P.A.T.A. for over 30 years and has no sixpenny size.

PARKE, DAVIS & CO., 50 BEAK ST., LONDON, W.1

●
Send for
Bonus Terms

GlucoDin

The Instant Energy-Giver



DISPLAY PARCELS FOR THE SPRING

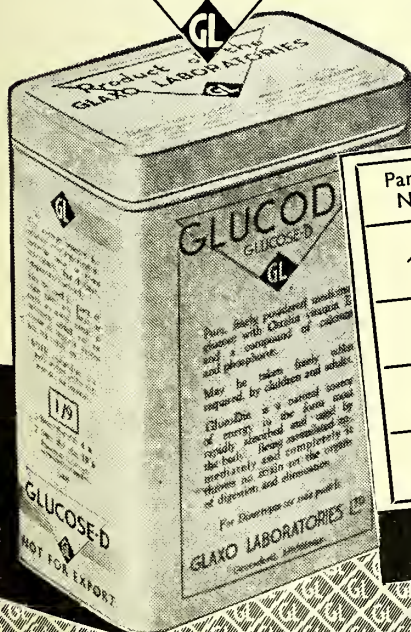
Opportunities for sales of GlucoDin have never been greater than they are to-day. In four different ways, GlucoDin is of special importance under present war conditions. 1. During and after 'flu, GlucoDin gives a steady source of energy to support the heart and to stimulate the appetite. 2. For soldiers in

training, GlucoDin builds reserves of energy against unaccustomed physical activities. 3. For sufferers from war-strain GlucoDin calms nerves and floods the body with new energy. 4. For excitable, nervy children, GlucoDin overcomes

biliousness and other symptoms of Ketosis. Display parcels enable you to stock up with all sizes at 33 $\frac{1}{3}$ per cent profit terms. Order your spring stocks to-day.



PRODUCT OF THE
GLAXO LABORATORIES

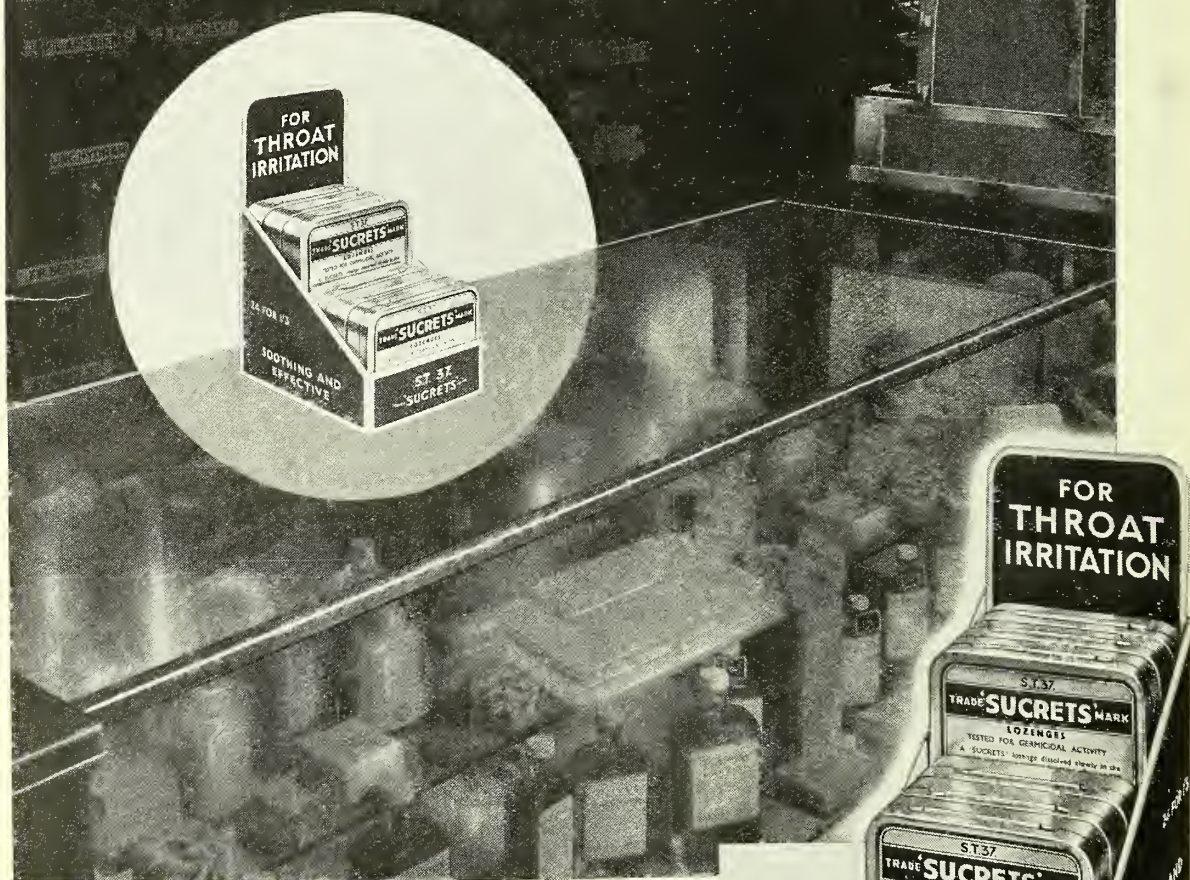


Parcel No.	Contents	Cost	Parcel	Profit
		per Parcel	sells for	
10	4×7 lbs.	£ s. d. 1 12 8	£ s. d. 2 9 0	£ s. d. 16 4
11	24×1 lb.	1 12 0	2 8 0	16 0
12	48×1 lb.	3 4 0	4 16 0	1 12 0
13	12×3 lbs.	2 2 0	3 3 0	1 1 0

PROFIT — 33 $\frac{1}{3}$ %

GLAXO LABORATORIES LTD., GREENFORD, MIDDX. BY Ron 3434

Keep this Profit-Making Display on your Counter



'SUCRETS' are a "pick-up item" for every customer with throat irritation! Displayed prominently on the counter, the 'Sucrets' counter container will make many reminder sales for you.

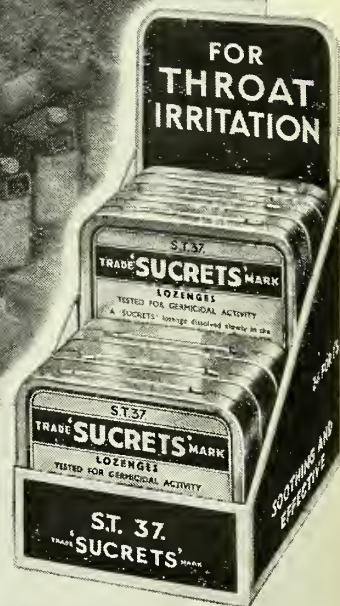
'Sucrets' are profitable, too, because every box is a one-and-threepenny sale. And they bring satisfaction to your customer!

Send for Bonus Terms

SHARP & DOHME LTD.

Mulford Biological Laboratories

76/78 CITY ROAD, LONDON, E.C.1.



'SUCRETS' LOZENGES

Tested for Germicidal Activity

Dissolved slowly on the tongue 'Sucrets' produce a marked soothing effect on the mucous membrane of the mouth and throat . . . promptly allay that "scratchy" feeling.

'Sucrets' are convenient to carry. They are packed 24 in a neat metal box, each 'Sucret' individually wrapped. They may be carried loose in the handbag or pocket, or kept at the bedside.

EUTICAL JOURNAL

MARCH 2, 1940

Retailer's Buying Guide March

Although Easter is only a month ahead the chemist is still very busy with winter business. He is having great difficulty in getting from manufacturers or wholesalers supplies of many lines he badly wants: pastilles and lozenges in tins are particularly scarce, owing to the big demand coupled with the difficulty of getting tins. Many proprietaries too are being marked "to follow" on the invoice, because of lack of containers.

... but not Meggeson!

There is no shortage of Meggeson Pastilles, Tablets, Lozenges, or of Tins, Cartons, or make-up of any kind—any slight delays have been entirely due to poor transport facilities and have now been corrected.

REMEMBER MEGGESON NEVER LETS YOU DOWN!

Our Address ?

MEGGESON & CO. LTD., LLEWELLYN ST., LONDON, S.E.16

BERmondsey 1741 - 1742 - 1743

Telegrams : Meggeson, Southpark, London

INDEX TO ADVERTISERS

Abietsan Manufacturing Co., Ltd. xviii	Campbell, J. D. Leader Page	Eueryl, Ltd. viii
Acton Pill & Tablet Co., Ltd. xxxii	Cassell, F. W., & Co., Ltd. xxxii	Evans Sons Lescher & Webb, Ltd. 25
Armour & Co., Ltd. 28	Cellucotton Products, Ltd. xxx	
Association of Manfg. Chemists, Ltd. Col. Supp.	Cephos, Ltd. v	
	Chemist and Druggist, The 12	Fellows Medical Manfg. Co., Ltd. vi
	Clay & Abraham, Ltd. v	Freeman, John, & Co., Ltd. xiv
	Cooper, McDougall & Robertson, Ltd. Cover iv	Freeman, Wm., & Co., Ltd. Leader Page
B.P.S., Ltd. xiv	Coty (England), Ltd. 18	Freudentheil Smith & Co. xxxii
Beetham, M., & Son xii	County Perfumery Co., Ltd. 26, 28	
Bell, G., & Sons, Ltd. Leader Page	Cox, Arthur H., & Co., Ltd. 8	
Bell, John, Hills & Lucas, Ltd. 14, Leader Page	Cresswell Bros. xxii	
Berton, Arthur, Ltd. xxx	Crookes Laboratories (British Colloids, Ltd.) 3	Gardner, W., & Sons (Glos.), Ltd. xxviii
Bevington Merchandising Co., Ltd. xii	Cross, J. E. & Co., Ltd. xvi	Glaxo Laboratories, Ltd. 1
Blythe, W., & Co., Ltd. ii	Cumming, J. W., & Son, Ltd. xxxii	Gower, John Col. Supp.
British Felsol Co., Ltd. Leader Page	Cussons, Sons & Co., Ltd. xxiii	Goya xxv
Bronnley, H., & Co., Ltd. xviii	Cuxson, Gerrard & Co., Ltd. 6	Grey, Adelaide, Ltd. xiv
Brook, Parker & Co., Ltd. xx		Grossmith, J., & Son, Ltd. xvii
Burge, Warren & Ridgley, Ltd. xiv	D.D.D. Co., Ltd. xxviii	
Burgoyne, Burbidges & Co., Ltd. Front Cover	Davenport, J. S., Ltd. 26	Hampden Residential Club Col. Supp.
Burrough, James, Ltd. Leader Page	Dearborn (1923), Ltd. xiii	Hampshire, F. W., & Co., Ltd. vii
Burroughs Wellcome & Co. 29	Demuth, R. 22	Hampson, F., Ltd. 5
Bush, W. J., & Co., Ltd. xix	Drugs and Toilets (Pty.), Ltd. xxix	Hawkins, L. G., & Co., Ltd. 27
	Elfrida Perfumery Co. xviii	

(continued overleaf)

EVERY "PENNY" SENT ABROAD HELPS THE ENEMY

BRITISH MANUFACTURED

BRONCHOVYDRIN

OWNED BY
MADE BY
FOR SALE IN

BRITISH

CAPITAL
CHEMISTS
PHARMACIES

BUY BRITISH!

MOORE MEDICINAL PRODUCTS LIMITED

3-5 BURLINGTON GARDENS, LONDON, W.1

'PHONE: REGENT 2724

'GRAMS: ASCURE, PICCY, LONDON

INDEX—contd.

Hobson, Trimble & Co., Ltd.	xxvii	Mundet Cork Products, Ltd.	xxvii	Saville Perfumery, Ltd.	x, xi
Howard, Lloyd & Co., Ltd.	iv	Mysore, Trade Commissioner for, in London	ii	Scurr, C. A.	xxxii
Howards & Sons, Ltd.	i	National Association of Opticians	xxxii	Sharp & Dohme, Ltd.	Cover 2
International Bottle Co., Ltd.	17	Nazone, Ltd.	xxxiv	Solazzi Liquorice.	ii
Jeyes' Sanitary Compounds Co. Ltd.	24	Newball & Mason, Ltd.	xxxii	Solport Bros., Ltd.	xxi
Kay Bros., Ltd.	xxix	Ormerod Engineers, Ltd.	xx	Splendor, Ltd.	xxxii
Keen Robinson & Co., Ltd.	vi	Papier Poudre Ltd.	ix	Suter, A. F., & Co., Ltd.	iv
Kolynos (Sales), Ltd.	xxxiii	Parke, Davis & Co.	Cover ii	Swales, T.	xxxii
Lax & Shaw, Ltd.	15	Phosferine (Ashton & Parsons), Ltd.	vi	Thackray, Chas. F., Ltd.	xxix
Luft-Tangee (London), Ltd.	xiii	Pifco, Ltd.	xxxii	Thornton & Ross, Ltd.	13
Mather, Wm., Ltd.	xxx	Potter & Clarke, Ltd.	10, 11	Town Talk Polish Co.	24
Matthews, D., & Son, Ltd. Col. Supp.		Proprietary Articles Trade As- sociation	v	United Glass Bottle Manufac- turers, Ltd.	19
Maw, S., Son & Sons, Ltd.	23	Ransom, Wm., & Son, Ltd.	9	Veno Drug Co., Ltd.	7
Meggeson & Co., Ltd.	4	Reckitt & Sons, Ltd.	iv	Vosemar, Ltd.	xxiv
Moore's Medicinal Products, Ltd.	5, 24	Rendell, W. J., Ltd.	16	Wagner, R. V.	xxvii
Morrell, John, & Co., Ltd.	xxvi	Rice, Steel & Co., Ltd.	21	Walton, T. H., & Co., Ltd.	xxix
Mosans Quinine Pessaries.	xxxii	Roberts' Patent Filling Machine Co., Ltd.	xxviii	Warriek Bros., Ltd.	30
		Rozalex, Ltd.	xxxii	Washington Chemical Co.	xxxii
				Whiffen & Sons, Ltd.	Cover iii
				Wood Bros. Glass Co., Ltd.	20
				Zimmermann, C., & Co., Ltd.	iii

REVISED PRICES**“SANOID”**

COMPOUND

**ZINC & STARCH
TOILET POWDER**

	Packets		Drums		
RETAIL prices	2d.	3d.	*3½d.	*7½d.	*1½

★ Retail Prices Increased

TRADE prices	1/4	1/10	2/4	4/8	8/6	per doz.
--------------	-----	------	-----	-----	-----	----------

(Reduced prices for quantities)

The above revisions come into operation from March 8

CUXSON, GERRARD & CO. LTD.
OLDBURY

A winning combination

VENO ★ ENO ★ THERMOGENE



The new and simplified buying arrangements mean INCREASED PROFITS for YOU!

There is a clear advantage to buyers, both in added convenience and in actual profit, under the new buying arrangements for Venos, Eno and Thermogene Products. **Kindly write at once if you have not received full details of these combined terms.** The amazing Goodwill represented by these three famous names is something to make the most of—all the year round. So keep up your stocks! Come what may your customers will continue to ask for the brands they can trust. Let us know your requirements in good time, so that we may support you to the very best of our ability.

VENO DRUG CO. LTD.

CHESTER ROAD • MANCHESTER 16

*An
ever-increasing
Success!*

SULPHUR TABLETS



IN BULK
CARTONS
BAGS & ROLLS

ORANGE
RASPBERRY
OR LIME FLAVOURS

Made from Fresh Fruit Essences—Particularly palatable

Cellophane Rolls of 20
(3 doz. in smart show outer)

13/-
per gross

Coloured Cellophane
Bags

3/9
per dozen

In BULK—2-oz. Cartons FREE

7 lbs. @ **1/3** 14 lbs. @ **1/2** 28 lbs. @ **1/0½**

56 lbs. @ **11½d.** 112 lbs. @ **10½d.**

Packed as "OWN BRAND" for orders
of 14 lbs. and over at 1d. lb. extra

PRICES SUBJECT TO MARKET FLUCTUATIONS.

ARTHUR H. COX & CO. LTD. BRIGHTON

RANSOM

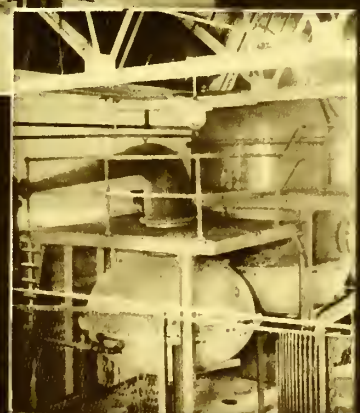
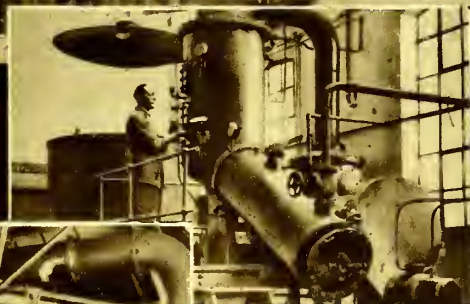
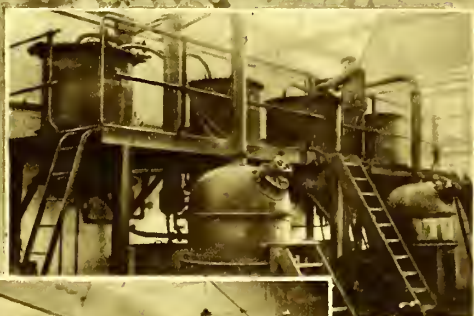


**CULTIVATORS OF BELLADONNA,
HAMOMILE, DIGITALIS, HENBANE, LAVENDER, etc.**

EXTRACTS

SOLID AND LIQUID

**TINCTURES,
RESINOIDS,
OLEO-RESINS,
MEDICINAL RESINS,
EXPRESSED JUICES,
ESSENTIAL OILS**



**ALOID, CAPSICIN, GINGERIN,
ERGOTIN, SCAMMONY AND
JALAP RESINS, CHLOROPHYLL,
LEPTANDRIN, EXTRACT OF
QUASSIA, QUASSIN.**

WILLIAM RANSOM & SON Ltd. ESTABLISHED 1846

Manufacturing Chemists **HITCHIN, Herts.**

**Sure Selling
"Summertime"**



Retails At **2/9**



ARNAUD'S BEAUTY B
CONTAINS

ARNAUD'S FACE POWD
ARNAUD'S VANISHING CRE
LIPSTICK

AMARYLLIS FLORAL SC
AMARYLLIS BATH SALTS

Retail 2/9 Price per doz.

SUN-TAN CREAM

A greaseless Cream for preventing Sunburn and inducing Sun-Tan.

Price per doz. 7/4.

3 doz. 7/- per doz.

POTTER & CLARKE LTD

ecessities



CALAMINE LOTION
(Arnaud's)
GREEN AND GOLD
EMBOSSED LABELS

per doz.
Bakelite Capped Bottles 7/6
Bakelite Capped Bottles 4/9

per doz.
7/6
4/9

EYE-SCRIPT
SPECIAL APPEAL TO
MOTORISTS

9d. Bottles - 5/6 per doz.
1 1/2 Bottles - 8/9 per doz.
Showcard with every Order



It is as important to
CLEANSE THE EYES daily
as it is to clean the teeth



**'LIDO' SUNBURN
LOTION AND
SUN-TAN OIL**
7 1/2 d. Bottles (3 oz.)
5/- per doz.
1/- Bottles (6 oz.)
8/3 per doz.



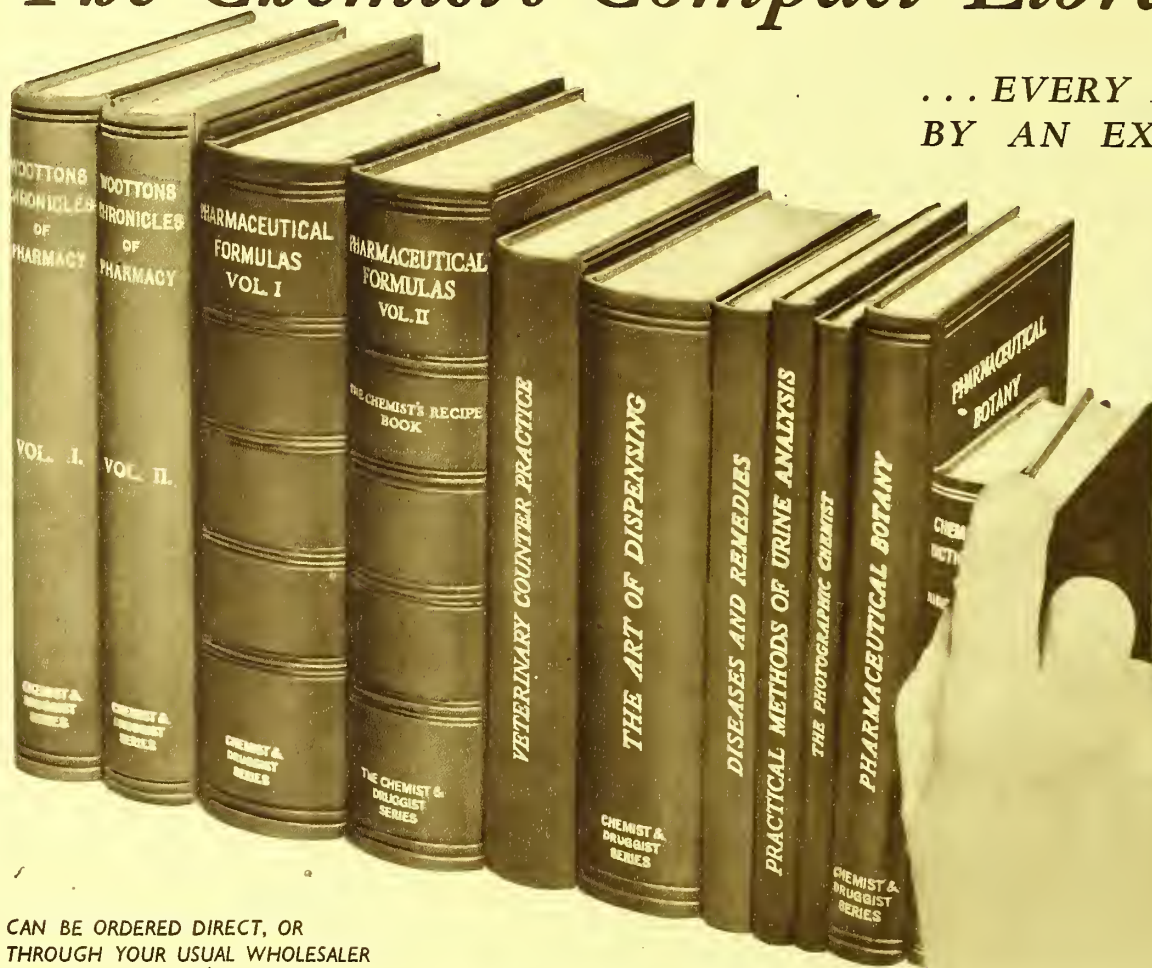
64 ARTILLERY LANE, LONDON, E.1 . 77 DANTZIC STREET, MANCHESTER 4

TELEPHONE: BISHOPSGATE 4761-6
TELEGRAMS: HOREHOUND, PHONE, LONDON

TELEPHONE: BLACKFRIARS 8734
TELEGRAMS: HOREHOUND, MANCHESTER

The Chemist's Compact Library

... EVERY BOOK
BY AN EXPERT



CAN BE ORDERED DIRECT, OR
THROUGH YOUR USUAL WHOLESALER

**THESE BOOKS HAVE BEEN SPECIALLY WRITTEN FOR YOU !
YOU NEED THEM IN YOUR DAILY PRACTICE**

		By Post			By Post
Pharmaceutical Formulas, Vol. I ...	15/-	15/6	Urine Analysis ...	4/-	4/3
Pharmaceutical Formulas, Vol. II ...	15/-	15/6	Wootton's Chronicle of Pharmacy ...	10/6	11/-
Pharmaceutical Botany ...	5/-	5/4	The Photographic Chemist ...	3/6	3/8
Dictionary of Medical Terms ...	8/6	8/10	A Handbook to Pharmacy ...	5/-	5/4
Provincial Hospital Pharmacopœias ...	3/-	3/2	'C. & D.' Price List Formulary ...	2/6	2/6
'C. & D.' Stocktaking Pad ...	2/6	2/6	Veterinary Counter Practice ...	10/-	10/6
Diseases and Remedies ...	7/6	7/10	Art of Dispensing ...	10/6	11/-

'C. & D.' Poisons Guide, price 4/6. 4/9 post free

Shops Act Cards: "A" for Sunday Closing, "B" for
Weekday Closing, 1/- each, 2 for 1/9, post free.

The
CHEMIST AND DRUGGIST

28 ESSEX STREET, LONDON, W.C.2.



SANIDENT



DENTURE CLEANSER

Sanident Denture Cleanser is prepared and packed in the countryside under ideal conditions of hygiene. Only an efficient and economical modern plant could produce Sanident so inexpensively.

Three different factors contribute towards its success:

1. The extra large bottle of pure perborate cleanser.
2. The striking modern package with leaflet enclosure.

3. The generous margin of profit for the Chemist . . . 6d. on every 1/3 bottle.
66% Profit on Cost

Sanident is sold only through Chemists. If you are not yet selling this excellent product, please write for a sample bottle, and particulars of free gift offer. Then judge its purity and value for yourself.

As a potential source of genuine customer satisfaction and ready sales, Sanident is without equal as a Denture Cleanser.

Attractive Display material is available.

THORNTON & ROSS LIMITED, *Manufacturing Chemists,*
LINTHWAITE, HUDDERSFIELD.

*....leave the manufacture,
packing, and dispatch of
your Product to us!*



In our new model factory we employ a staff of Chemists who's energies are devoted to the various stages of the manufacture of your product.

We maintain the high standard of quality and efficiency on which *you* have built up your good reputation.

We offer you . . . manufacturing, packing, printing and distributing facilities. It pays you to take advantage of our service.



JOHN BELL SPECIALITIES

Continually increasing sales are a sure sign both of the popularity and efficacy of the well-known "John Bell" lines such as:

- "John Bell" Brand Cold Cure Capsules
- "John Bell" Brand Tonic-Phosphates
- "John Bell" Brand Halibut Oil and Malt
with Colloidal Iron
- "Triad" Brand Cherry Malt and Oil

JOHN BELL, HILLS & LUCAS LTD. Oxford Works, Worsley Bridge Rd, London. S.E.26

P E R F U M E

A clean sparkling well-designed Container will make all the difference to your sales. . . . A sound product and a Lax & Shaw bottle are the perfect sales combination. Our research and design departments are always available to manufacturers. A prompt quotation and sample is yours for the asking.



Wholesale and Export Only

LAX & SHAW LTD.

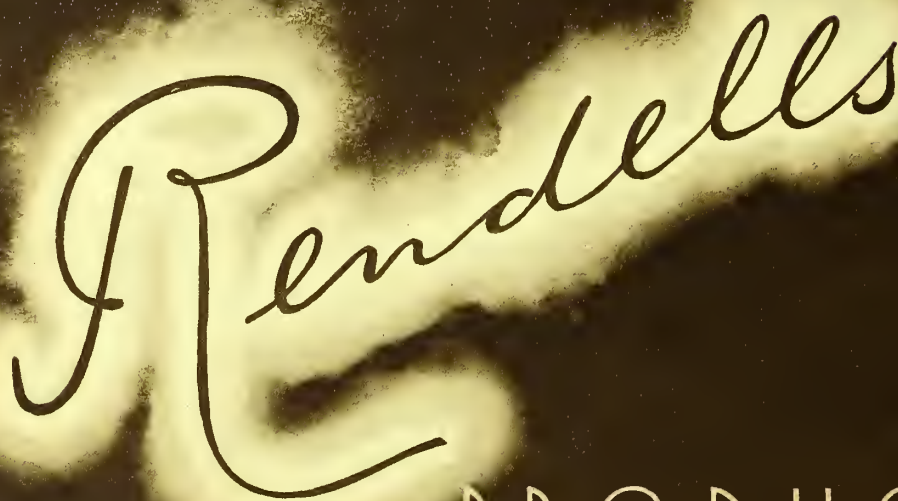
Telegrams 'Feeders'
'Phone, Leeds

REGD. OFFICE: ALBERT GLASS WORKS, HUNSLET, LEEDS, 10
THREE FACTORIES: ALBERT - CLARENCE - DONISTHORPE
LONDON OFFICE: 29 LUDGATE HILL, E.C.4

Telephone 21568
(2 lines)

B O T T L E S

A FAMOUS NAME FOR OVER FIFTY YEARS

A large, stylized, white cloud-like graphic with a soft, ethereal texture. The word "Rendells" is written in a flowing, cursive script across the center of the cloud. The cloud has a bright, glowing core in the middle, fading out towards the edges.

Rendells

PRODUCTS

for Feminine Hygiene

W. J. RENDELL LTD.

HARDWICK HOUSE, 161-5 ROSEBERY AVENUE,
LONDON · E · C · 1

English Bottles

OF QUALITY
A SPECIALITY



REG'D DESIGNS



The International Bottle Co. Ltd.

Phone : MET 6161
Grams : Autrefois-Telex-London

48 FORE STREET, LONDON, E.C.2

This new COTY line

Magnet TRADE MARK make-up

will pull sales



No. 9496

MEET "Magnet" Make-up!

This new Coty creation is a close harmony in make-up that solves a wartime make-up problem. There's a three-way convenience in

"Magnet" — three make-up tips that will sell. "Magnet" will be widely advertised — see the colour page in the March issue of "Vogue."

1. **Magnet LIPSTICK** (Retail 4/6)

A new, lovely clear red tone that passes parade-ground scrutiny with flying colours. Adds the right spot of colour to lips above khaki and blue uniforms. It's warm — but not too exotic!

2. **Magnet POWDER ROUGE**

Again a match with the lipstick. Keeps the roses blooming all through the day — applied like powder whenever freshening-up is needed, it is a boon for women in busy service or wartime jobs, who lack the place, time and opportunity for complete replacement of make-up. It matches with both the "Magnet" Cream Rouge and the "Magnet" Lipstick.

3. **Magnet CREAM ROUGE**

Matches up to the lipstick. Smooth as whipped cream, it is a perfect base for the day's make-up. Gives a natural milk-and-roses glow that just won't come off. Spreads evenly — no crudity.

No. 9496 Counter Display Box, as illustrated

		£	s.	d.
4	"Magnet" Red Lipsticks at 4/6 -	18	0	0
2	"Magnet" Powder Rouges at 1/9 -	3	6	0
1	"Magnet" Cream Rouge at 2/- -	2	0	0
		1	3	6
	Less 33 1/3%	7	10	0
		15	8	0

STOCK THIS WARTIME WINNER BY *Coty*

**GREATER
THAN EVER IS THE
DEMAND** FOR



PERFECTED
**WHITE
CAP**

U.G.B.

MEDICAL BOTTLES



Cork-Mouth.
Photograph of
actual package
of Cork-mouth
bottles with
cover removed



White Enameled
Metal Screw-Cap.
Photograph of
actual package of
screw-cap bottles
with the cover
removed.



White Korka-
lite Moulded Cap
Photo of actual
package of bottles
with White Kor-
kalite Moulded
Caps.

**WASHED AND STERILIZED
—READY FOR USE—
THE IDEAL
DISPENSING BOTTLE
IN ANY EMERGENCY**

UNITED GLASS BOTTLE

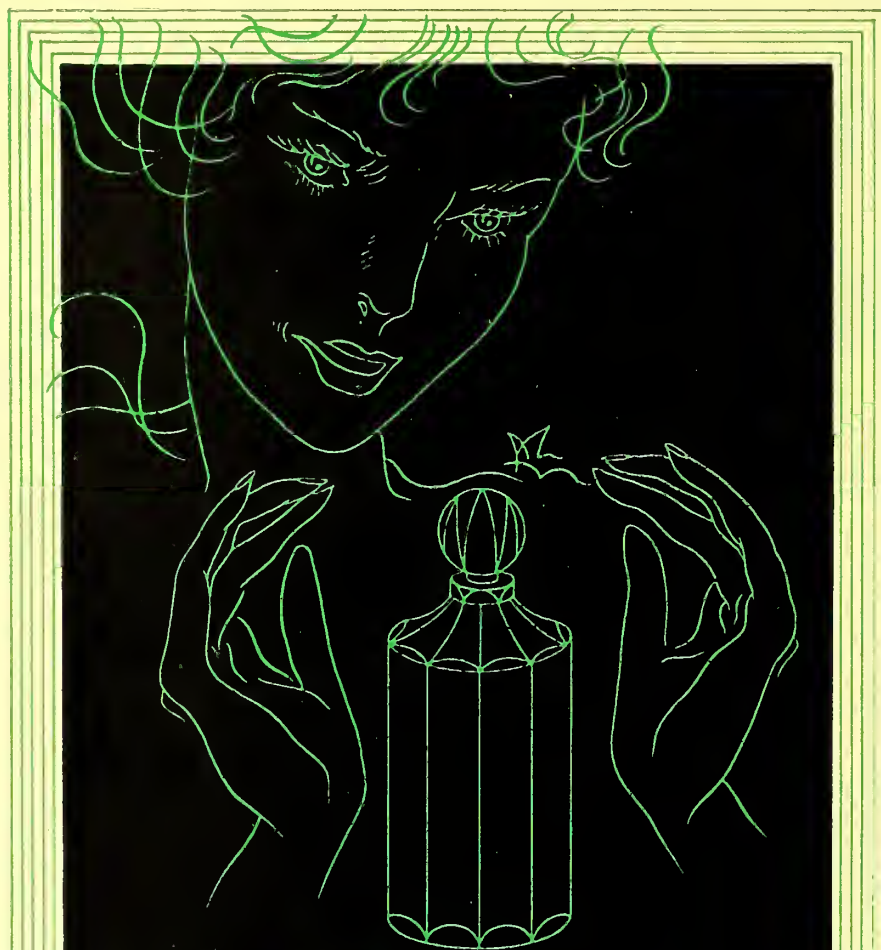
MANUFACTURERS LTD.

*The Largest Manufacturers of Glass Bottles
in Europe*

8 LEICESTER STREET, W.C.2

Telephone: GERrard 8611 (10 lines)

Telegrams: Unglaboman, Lesquare, London



BEAUTIFUL
Glassware

We create and manufacture high quality
glassware for cosmetics and perfumery

WOOD BROS. GLASS CO. LTD.

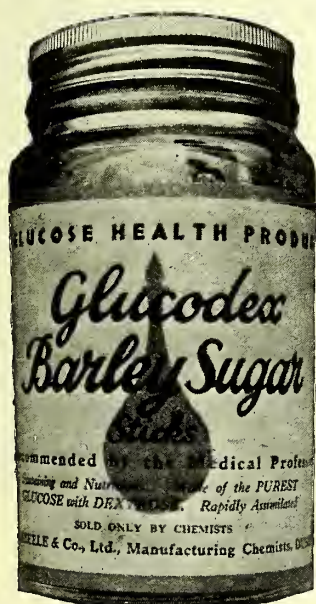
ESTABLISHED 1828

BARNSELY



REG. TRADE MARK

ENGLAND

RICE,**MANUFACTURING****STEELE & CO. LTD.****CHEMISTS****DUBLIN****GLUCOSE
HEALTH PRODUCTS**

Glucodex, 1/3 Jars
 Glucotabs, 1/3 Jars
 Mixed Fruit-Acid, Acid Lemon,
 Barley Sugar, Lime, etc.
 Glucosticks, 2d. each
 Koff Sticks, 2d. each; 5 doz.
 Jars.
 Glucofruits, 3 oz., 6d.; 5 lb.
 Jars.
 Carrageen Cough Cubes
 Fruit Pastilles
 Thirst Quenchers
 Peppermints:
 2 doz. Outers, Retail 6d.
 Chestoids

**CARBOY BRAND**

Antiseptic Pastilles
 Glycerine and Black Currant
 Glycerine
 Bronchial Catarrh
 Menthol and Eucalyptus
 Cherry Cough
 Carrageen
 Glycerine, Lemon and Honey
 Friars Balsam
 Glycerine of Thymol
 Honey and Horehound
 Eucalyptus Oil
 Voice and Throat
 Paraseptic
 7 lb. Display Jars,
 2 and 4 oz. Tins

LOZENGES, B.P., etc.

Bismuth
 Phenol
 Pot. Chlor.
 Krameriae and Cocaine
 Morphia and Ipecac.
 Bronchial
 Brompton Hospital
 L.L. & C.
 Cinnamon
 Peppermints, Mitcham C.S.
 Santonine
 Sulphur
 Sulphur Garrod
 Iodised Throat
 Tannic Acid

**MEDICINAL
PREPARATIONS**

Carragol
 Paragol

VARIOUS

Chocolate Worm Cakes
 Liquorice and Menthol Pellets
 Liquorice Sticks
 Resco Toilet Preparations
 Resco Shampoos
 "Puritan Brand" Olive Oil

**TABLETS COMPRESSED
AND PACKED**

Sulphur and Yeast
 Heart Shaped Indg.
 Sulphur
 Glucovite
 Cachous
 Formamints
 Bismuth Magnesia
 Maclean's Stomach
 Bismuth Dyspepsia
 Avitex Yeast
 Iron and Yeast
 Calcium D.
 Chilblain
 Hits Cough Tabs.

CHEKS. BULK

Cheks, 4d. Tins
 Cheks, 7d. Tins



Please write for complete Price Lists

TWO SUITABLE LINES THAT WILL YIELD GOOD SALES THIS SEASON

Frozoclone

REGD

THE ORIGINAL SOLID EAU-DE-COLOGNE

FROZOCLONE is the Finest Eau-de-Cologne, solidified and fortified with Menthol. For this reason it has many useful qualities, and is handy at all times when the freshness of Eau-de-Cologne is most welcome. **Invaluable in these times of strain and nervous fatigue.**



**A BOON TO ALL WOMEN IN THE SERVICES
A.R.P., FIRST AID, AND RED CROSS UNITS**

LARGE SIZE BOTTLES	3s. 6d.	28/- per doz.
SMALL „ „	2s. 0d.	16/- „
IVORETTES „ „	2s. 0d.	16/- „

NOTE—The Ivorette, specially designed for the hand-bag and Service Pocket, contains the same quantity of FROZOCLONE as the Small Size

FREE ON REQUEST

This exquisite reproduction of colour photography shows the three packs of Frozoclone in life size and actual colours. Suitable for Window and/or interior display.
10" x 8"

Also, similar cut-out 'show-stand' designed to display one of each pack (actual)

GET NEW BUSINESS IN THE RECEPTION AREAS!



Carnate

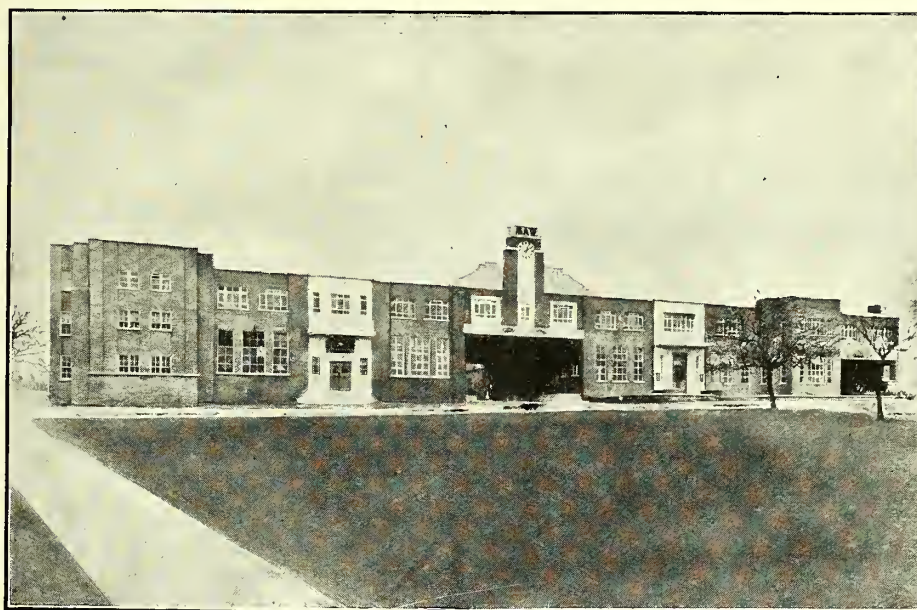
The renowned Nail Polish that **nourishes** the nails. It is colourless and therefore **suitable for women in the services**. A well-established line . . . in an exquisite pink "Beatl" container with screw cap.

Produces a natural brilliant polish. RETAIL 1/9 14/- per doz. P.A.T.A.
(waterproof and antiseptic)

R. DEMUTH'S LABORATORIES

68 Salusbury Road and Montrose Avenue, N.W.6

'Phone: Maida Vale 5340



● We are holding large stocks of Bread-and-Butter lines at Aldersgate House, with the possible exception of one or two items in which there are manufacturing difficulties beyond our control.

Please send us regular 'Letter' orders and we can give you maximum supplies.

Our representatives are carrying particulars of the goods which we have in stock and of prices current. You can rely more than ever on Maw's service although we are at War.

- MAW'S SURGICAL DRESSINGS.
- MAW'S PROFESSIONAL SUNDRIES.
- MERITOR TOILET BRUSHWARE.
- MERITOR FASHION SUNDRIES.
- THE LARGEST STOCK OF ASSORTED CHEMISTS' SUNDRIES UNDER ONE ROOF IN BRITAIN.

S. MAW, SON & SONS, LTD.
ALDERSGATE HOUSE,
NEW BARNET, HERTS.

● TELEPHONE—BARNET 5555.

● TELEGRAMS—ELEVEN, BARNET.

JEYES'**ANTISEPTIC
INTERLEAVED****TOILET PAPER****Important Notice****REVISED PRICE**

AS from Monday, March 18th, 1940, the Retail Price of Jeyes' Antiseptic Interleaved Toilet Paper will be 7½d. per packet, and the price to the Trade will be 67/6 per gross (subject to usual discounts). In each case this represents an increase of 25%. The actual cost to us of the raw material is now more than 50% higher than at the outbreak of War.

In view of the rationing of paper, new business cannot be entertained, and the offer of our Toilet Paper Boxes has therefore been withdrawn, so that all supplies may be available for present customers. The rationing may, however, make it impossible to execute orders in full, and customers will help us, and themselves, by sending smaller orders at shorter intervals, rather than large orders as hitherto, so that we may maintain a steady supply of paper to all in the trade.

JEYES' SANITARY COMPOUNDS COMPANY, LTD.
PLAISTOW, LONDON, E.13

It's no gamble to stock
TOWN TALK
—because 15,000,000 women read
TOWN TALK SILVER POLISH
advertisements each month

ORDER DIRECT OR FROM

MANCHESTER:
D. Mawdsley & Co.
James Woolley Sons & Co.,
Ltd.

LEEDS:
Goodalls (Leeds), Ltd.

LEICESTER:
E. H. Butler & Son.

NEWCASTLE-ON-TYNE:
Wilkinson & Simpson, Ltd.

LONDON:
Brooks & Warburton, Ltd.
May, Roberts & Co., Ltd.
Butler & Crispe.

LIVERPOOL:
Ayrton, Saunders & Co., Ltd.

THE TOWN TALK POLISH CO., MANCHESTER, 10

BRITISH MANUFACTURED

HADENSA OINTMENT
NEDA FRUIT CUBES
LEO PILLS

All to the same formula and at
the same prices as the original
German products

*Can now be obtained from your
wholesaler or direct from*

**MOORE MEDICINAL
PRODUCTS LTD.**

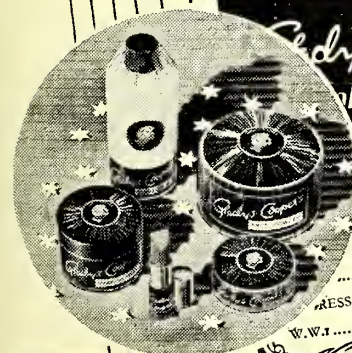
**3-5 BURLINGTON GARDENS
LONDON, W.1**

REGENT 2724



*Watch Beauty
come to life!*

"I defy your nearest and dearest to know that faint blush is not your own" says one of Britain's best-known beauty experts writing of Gladys Cooper's Blush Rouge. Drift the least touch of this ultra fine powder on to your cheek (a tiny puff is provided) and see the natural tone of your skin come alive under its touch. Yes, the colouring is your very own—but magical now in its witchery!



Gladys Cooper's
BLUSH ROUGE

Coupon

My Beauty Preparations, 48, St., London, W.1. Please box of Blush Rouge and free I enclose 6d. (P.O. or stamps).

NAME.....

ADDRESS.....

W.W.I.....

These Advertisements and

An attractive new angle on the Gladys Cooper's beauty story will be appearing in WOMAN, GOOD HOUSEKEEPING, WOMAN AND BEAUTY, HOME CHAT, HOME NOTES, PICTURE SHOW, BRITANNIA AND EVE, WOMAN'S ILLUSTRATED, WOMAN'S WEEKLY and WOMAN'S FAIR. In these new advertisements thousands of women will be finding the answer to their own 'pale cheeks' problem.

these famous Beauty Experts are

Gladys Cooper's preparations are recommended by Jane Clare in "Home Notes," Vanity Fayre in "Home Chat," Jean Barrie in "Woman's Fair," Betty Brand in the "Sunday Graphic," Mary Scott in "Woman's Illustrated," Ann Seymour in "Woman and Beauty," Gillian in "Picture Show," Francis Loring in "Good Housekeeping," Muriel Cox in "Woman's Sphere," and in the editorial columns of Vogue, Britannia and Eve, Weldon's and Woman's Weekly.

making Sales for these Preparations

The famous Blush Rouge retailing at 2/6—is being made the spearhead of this advertising campaign. One of the most attractive features of this popular line is that there is only one shade to be stocked. It tones naturally with every type of colouring. A comprehensive range priced from 1/6 to 17/- includes:—

- ★ BLUSH ROUGE
- ★ FOUNDATION SKIN FOOD
- ★ VANISHING CREAM
- ★ COMPLEXION MILK
- ★ 169 TONIC CREAM
- ★ FACE POWDER
- ★ CLEANSING CREAM
- ★ LIPSTICK

EVERY ONE OF THESE 33 1/3% PROFIT PREPARATIONS SHOWS 33 1/3% ON SALE

This is your chance to increase goodwill and profits by selling your customers on the whole range of Gladys Cooper's Beauty Preparations. Write for display material and counter literature free with order.

Gladys Cooper's BEAUTY PREPARATIONS

Dr. J. Collis Browne's Chlorodyne
 and
The Pharmacy and Poisons Act, 1933

Dr. J. Collis Browne's
CHLORDYNE

SALE RESTRICTED TO REGISTERED CHEMISTS

PURCHASER'S SIGNATURE NOT REQUIRED

Sole Proprietors :
J. T. DAVENPORT LTD.



**Union St.,
 London, S.E.1**

COMPOUND SYRUP OF
"FELLOWS"
HYPOPHOSPHITES

TRADE

MARK

For "run-down" conditions, and as a Tonic during and after convalescence, Compound Syrup of Hypophosphites "FELLOWS" has the support of the Medical Profession.
 Such care is devoted to the preparation of "FELLOWS", that only by making sure of the name can you be certain of the same unvarying quality.
 When you are asked for a tonic, remember that "FELLOWS" has been in the forefront for more than 60 years and—it still leads.

FELLOWS MEDICAL MFG. CO., LTD.
 286, St. Paul Street West,
 Montreal . . . Canada

*A new selling opportunity!
Millions to be sold to Torch users!!*

*Strong National
Press and Publicity
Campaign*

1 ¹/₂ RETAIL

Below is a copy of advertisement

WARNING TO TORCH USERS

You can be prosecuted for flashing a torch upwards



UP-OFF

DOWN-ON

NOW YOU CAN'T BE WRONG

PUTS YOU ON THE RIGHT SIDE OF NEW LIGHTING LAW
AVOIDS HELPING THE ENEMY
PREVENTS ACCIDENTS
-NO DAZZLE
SAVES BATTERIES

LEGALITE
MERCURY TORCH SWITCH

1 ¹/₂ EACH

FITS ANY STANDARD TORCH

INCLUDING

**DAILY MAIL — DAILY EXPRESS
EVENING STANDARD — THE PEOPLE
Edinburgh Evening News—Glasgow Bulletin—Newcastle Journal and North Mail
— Yorkshire Evening Post — Manchester Evening Chronicle—etc.**

These are some of the papers in which advertising for Legalite will appear.

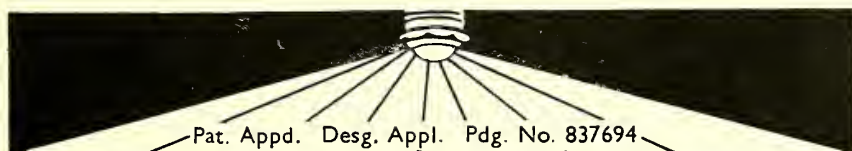
ALSO OTHER GOOD SELLING AIDS

SHOWCARD: An attractive showcard with the top half illustrated as shown on the left, and with 24 Legalites inserted in the base of the card for direct selling to the customer. Available free with order for 24 Legalites.

WINDOW BILL: As illustrated on the left. Available free.

STICKERS: Stickers for stationery, with the same illustration as shown on the left are available free.

Order To-day From Your Regular Wholesaler



Pat. Appd. Desg. Appl. Pdg. No. 837694

LEGALITE

MERCURY TORCH SWITCH

This is a "Supreme" guaranteed product manufactured by

L. G. HAWKINS & CO. LTD. 30/35 Drury Lane, London, W.C.2

Telephone: Temple Bar 5811

Outlook - much brighter



PACK FOR
HOME USE 3/6

HUNDREDS OF
NEW RECRUITS DAILY . .

The thousands of new blonde heads which are brightening the outlook to-day are more than beautiful — they are profitable. Profitable to the wise chemists who displayed Hiltone and caught the eyes of many of these young ladies.

Our big-scale National advertising is creating a big-scale demand for Hiltone—Home Pack sales more than doubled in the past few months! Keep Hiltone well to the fore and profit by the Bonus Terms:—

14 to the dozen,
7 to the $\frac{1}{2}$ -dozen.

HILTONE'S 'Brighter Hair' Campaign

DAILY EXPRESS • DAILY MAIL • DAILY SKETCH
DAILY MIRROR & SUNDAY PICTORIAL
And the Women's Magazines, Film and Popular Weeklies.

County Perfumery Co. Ltd., N. Circular Rd., W. Twyford, N.W.10

HT85

GLANOID

MEDICINAL PRODUCTS OF ANIMAL ORIGIN

Chemist Counter Lines

ARMOUR'S FLAVOURED JUNKET

GLANOID CALF'S FOOT JELLY

A FULL RANGE OF GLANDULAR
PRODUCTS PREPARED FROM FRESH
WARM GLANDS SUPPLIED IN
AMPOULES, TABLETS, LIQUIDS
AND CAPSULES

available in Package Form
or Bulk Containers

Also PEPSIN all strengths

PEPTONE

both Bacteriological and
Commercial

ADRENALIN B.P. 1932 (Pure)

PANCREATIN U.S.P

OX GALL Inspissated
 Powdered
 Purified

BILE SALTS POWDER

Send your enquiries to :

THE
Armour Laboratories
(ARMOUR AND COMPANY LTD.)

ARMOUR HOUSE • ST. MARTIN'S-LE-GRAND • LONDON • E.C.1

*Phone National 2424

*Grams Armosata-cent, London

"This weather
makes my skin
so rough"



'HAZELINE' CREAM

(TRADE MARK)

Women are ready *now* to purchase preparations for winter-roughened faces and hands. Recommend 'HAZELINE' CREAM for preserving the smooth texture of the skin and preventing harshness and chaps.

Collapsible tubes of two sizes and glass jars;
also glass jars containing 1 lb.



Reduced facsimiles

"HAZELINE'SNOW"

(TRADE MARK)

The original non-greasy toilet preparation

Recommend this beauty preparation for daytime use. Gives a smooth, matt surface and an ideal base for powder.

Collapsible tubes for the handbag
Glass jars for the dressing-table



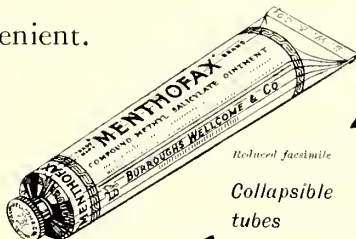
Reduced facsimiles

TRADE MARK 'MENTHOFAX' BRAND

COMPOUND METHYL SALICYLATE OINTMENT

Contains Methyl Salicylate, Menthol, Eucalyptol and Oil of Cajuput in a base of white beeswax and hydrous wool fat. Easily applied and quickly effective.

Soothing. Convenient.
Penetrative.



Reduced facsimile

Collapsible
tubes

Now is
the time to
sell these
products



BURROUGHS WELLCOME & CO., LONDON

G 2163

COPYRIGHT

WARRICK·BROS·LTD

R. HENDRIE & CO. • ESTAB. 1760 • MADDOCKS & CO.

FINE PRODUCTS FOR THE PHARMACY!

CAPSULES

Bulk, Packed and Speciality
Halibut Liver Oil
Cold Cure; Influenza
'Stankap'; Asthma; Digestive

LOZENGES

Iodized Throat; 'I-O-Mints'
Bismuth Co. B.P.; Antacid,
Linseed, Liquorice and Chlorodyne
Analgesic Throat

PHARMACEUTICALS

'Pulvellæ' and 'Chocellæ'
Olive Oil (*Warrick Freres*)
'Carbo-Absorbent'
- Granules—'Stankap' and Digestive

PERFUMES & TOILETS

Maddocks' and Hendrie's Series
'Cinet' and 'Fragretta'
Rose and Orange Flower Waters
Pot-Pourri and Lavender

PASTILLES

Glycerine of Thymol Comp.
Chronic Catarrh; Cherry Cough
Glycerine, Lemon and Honey
Iodized Glycerine Black Currant

TABLETS

Mouth Wash (Effervescing)
Bismuth Dyspepsia
Bismuth, Pepsin and Pancreatin
Chilblain Treatment

COLD PRODUCTS

'Nostrones' (Complete Treatment)
Ephedrine Nasal Compound
Smelling Salts
Ephedrine Nasal Cream

PILE PREPARATIONS

Suppositories
Ointments
'Pellæ' 8-Day Treatment
Stainless Pile Ointment

CONFECTIONERY

Glucose Preparations
Fruit Drops
Cachous

SEND TO—

WARRICK BROTHERS, LTD.

Telephone: CLERKENWELL 2452-3. Telegrams: WARRICKERS, NORDO-LONDON
CORRESPONDENCE FROM OVERSEAS SOLICITED

NILE STREET • LONDON

The CHEMIST AND DRUGGIST

for RETAILER - WHOLESALE - MANUFACTURER

The official organ of The Pharmaceutical Society of Ireland, The Pharmaceutical Society of Northern Ireland, The Chemists' and Druggists' Society of Ireland, and of other Chemists' Societies in Overseas Dominions

Published Weekly at

28 ESSEX STREET, STRAND, LONDON, W.C.2

Telegrams: "Chemicus, Estrand, London"

Telephone: Central 6565 (10 lines)

BRANCH OFFICES

MANCHESTER: 4 CANNON STREET (TEL.: BLACKFRIARS 3052)
SHEFFIELD: 9 HAUGH LANE, ECCLESALL (TEL.: 70268)
GLASGOW: 19 WATERLOO STREET (TEL.: CENTRAL 2329)
BIRMINGHAM: 111 NEW STREET (TEL.: MIDLAND 2921)

AUSTRALIA: 19 QUEEN STREET, MELBOURNE, C.1
NEW ZEALAND: 55A SHORTLAND STREET, AUCKLAND
PARIS: 155 AVENUE DE WAGRAM, XVII^e (TEL.: CARNOT 19.40)
NEW YORK: 500 FIFTH AVENUE

Emergency Address: THE PITMAN PRESS, LOWER BRISTOL ROAD, BATH Telephone: BATH 5491-92

NEWS OF THE WEEK

Standards for Laboratory Thermometers and Petri Dishes.—Revised specifications have recently been issued by the British Standards Institution. They include five series of thermometers for general purposes. Copies may be obtained from the Institution, 28 Victoria Street, London, S.W.1, price 2s. 2d. each, post e.

Workmen's Compensation—Royal Commission.—The Royal Commission on Workmen's Compensation intimate that their next sitting for the purpose of taking evidence will be held in Room 137 on the first floor of Thames House (No. 2 Entrance), Millbank, London, S.W.1, on Friday, March 15, at 10.30 a.m. The sitting of the Commission will be open to the public.

National Association of Women Pharmacists.—The annual members' night was held on March 7, the president (Miss Harvey) in the chair. Miss M. Stiles gave a vivid description of life in a country pharmacy; Miss W. M. Render spoke on pharmacists and pharmaceutical legislation in New Zealand; and papers were given by Miss M. Coates, Ph.C., on "Biological Stinging," and Miss V. Anderson, B.Pharm., Ph.C., on "Stored Food—Its Uses and Limitations." Mrs. Irvine proposed a vote of thanks. This was seconded by Miss Duncan.

A.R.P. Exhibit at Hull.—Lofthouse & Saltmer, Ltd., Hull, have arranged in the local Museum of Commerce and Transport an exhibition of drugs used in the first-aid treatment of gas wounds. In the centre of the case is an exhibit illustrating the method of functioning of a respirator; on either side are shown containers of accessories including normal saline tablets for use temporarily making accurate solutions for bathing contaminated eyes, castor oil and liquid paraffin. Other jars show white petroleum jelly, bleach powder, and calamine.

Import Licensing.—The Board of Trade announce that certain goods consigned from Hong Kong must be accompanied by an import licence on importation into the United Kingdom. Accordingly it will be necessary for importers to apply for individual licences in respect of any goods covered by the Import Prohibition List and consigned from Hong Kong and which were not shipped to the United Kingdom prior to March 1. The issue of licences in respect of importations from Hong Kong does not apply that the goods covered by the licences will be deemed to be of H.M. Customs and Excise to qualify for preference under the Import Preference Regulations.

Analysts' Society Officers.—The following have been elected officers and council members of the Society of Public Analysts and Other Analytical Chemists for the year 1940/41:—*President*: Mr. E. B. Hughes, D.Sc., F.I.C., *Past Presidents serving on Council*: Messrs. F. W. F. Arnaud, B. Dyer, J. Evans, E. Hinks, Roche Lynch, W. H. Roberts, G. Rudd Thompson. *Vice-*

Presidents: Messrs. E. B. Anderson, S. E. Molling, F. G. H. Tate, J. R. Stubbs (chairman, North of England Section), T. Cockburn (chairman, Scottish Section). *Treasurer*: Mr. G. Taylor. *Secretary*: Mr. Lewis Eynon. *Other Members of Council*: Messrs. C. A. Adams, F. C. Bullock, H. E. Cox, D. C. Garratt, L. H. Lampitt, G. W. Monier-Williams, C. J. Regan, T. Rendle, A. Scholes, W. M. Seaber, W. H. Simmons, W. W. Taylor, A. Lees (secretary, North of England Section), and J. B. McKean (secretary, Scottish Section).

Keighley Chemists Seek Affiliation.—Mr. Wilfred Broadley, 5 Grange Grove, Riddlesden, Keighley, has been appointed Secretary of the Keighley Chemists' Association in succession to Mr. W. H. Archer, who has retired after holding the position for several years. Efforts are being made to form a Keighley Branch of the Pharmaceutical Society, to work in conjunction with the Association.

Nottingham Chemists Discuss Future of Pharmacy.—The annual meeting of the Nottingham Branch of the Pharmaceutical Society, on March 7, over which Mr. I. A. Atherley presided, was followed by an address by the president of the Society (Mr. W. Deacon), on "Pharmacy Today." Mr. Deacon reviewed the history of the Society and pointed out that the future lay in the hands of the students of today. At the conclusion of the address points were raised by Messrs. A. O. Bentley, T. R. Burrows, J. R. Ball, J. Hutchby, S. M. Peretz (president, Pharmacy Students' Association and treasurer of the Students' Union) and students, to all of which Mr. Deacon replied. A vote of thanks was proposed by Mr. T. R. Burrows and seconded by Mr. S. M. Peretz. Tea was afterwards provided. In the evening an informal dinner was held, at which practically all members of the committee were present.

"Prizes for All" at Hull Whist Drive.—Hull Chemists' Association held its annual whist drive on March 7. A feature of the evening was the number of surprise gifts distributed after practically every hand. About seventy-five prizes had been given by manufacturing and wholesale firms, and few of the 120 players went away empty-handed. The drive was organised by a social committee led by Mr. H. Kingrose who, with Mr. E. A. Brocklehurst (president of the Association) acted as M.C. Mrs. Brocklehurst presented prizes to the following: *Ladies*: The Mesdames Gleadhill, D. H. Hindle, Nockall, Vinegrad, Holdsworth, Waudby, Rastall, Shepherd, Fox, Boyce, Cooper, Shipley and F. Palmer, and the Misses M. Willey, D. Stocks and Acton. *Gentlemen*: Messrs. J. Gosse, C. A. Hewitt, Topham, L. Harrison, F. N. Harrison, Vinegrad, Armstrong,

CONTENTS: p. 211
Late news in
Coloured Supplement

McWilliam and R. H. Watson, the Misses Baker, Brignell, Hockney and Wallis, and Mrs. Ringrose, playing as gentlemen. Proceeds were for the Pharmaceutical Society's Benevolent Fund.

"Cyanides" Entertain at Harrow.—The chief feature of the social evening organised by the Harrow Branch of the Pharmaceutical Society, on March 5, was a concert provided by the "Cyanides" (the London College of Pharmacy concert party). Most of the guests were present at their first "cyanide" show and were amazed at the sparkling original entertainment provided, which included original musical compositions, sketches, a rhyming pantomime and a pharmaceutical melodrama. The concert was produced and *compèred* by Mr. V. P. Gelli, and the artistes were the Misses Pat Murphy and Marjorie Harrison, Messrs. F. Tulley, H. Nix, D. Tapscott, N. Thomas, R. Thompson, Benny Lewin, Bruce Marshall, C. Henderson and John Bunn. During the interval there was an amusing "spelling bee," for which three teams of four members entered. The winners were Mrs. Jenner, Mrs. Robson, Miss E. M. Yonge and Mr. Young. Prizes provided by S. Maw, Son & Sons, Ltd., John Bell, Hills & Lucas, Ltd., McClure, Young & Co., Ltd., and Wright, Layman & Umney, Ltd., were handed to the winners by the chairman of the Branch (Miss M. C. Islip).

Food Lecture Quips at Liverpool.—Sir John Orr (director, Rowett Research Institute) who gave the Society of Chemical Industry jubilee memorial lecture on "The Chemical Aspects of Nutrition," at Liverpool recently, was introduced as "the man who put the Orr in porridge." The chairman (Mr. B. D. W. Luff) was alluding both to the speaker's advocacy of oatmeal as a food and to his Scottish origin. Sir John's nationality was again referred to by Mr. H. Humphreys Jones, who, in seconding a vote of thanks, pointed out that the proposer (Professor T. P. Hilditch) was an Englishman, Sir John hailed from "bonnie Scotland," and he himself represented "gallant little Wales." Having spent some time browsing into works of the founders and early presidents of the Pharmaceutical Society, which was celebrating its centenary in 1941, he was struck, said Mr. Humphreys Jones, by the amount of attention given to food questions even in those days; there had, in fact, been prophecies about what were today known as vitamins. Sir John Orr, in reply, said he well recalled the British Pharmaceutical Conference in Aberdeen in 1931, when there had been not only a first-class Conference, but a first-class dinner—a recollection that apparently afforded him, as a food expert, some pleasure, as well as the audience some hilarity.

IRELAND

Northern Ireland Register.—The 1940 Register of the Pharmaceutical Society of Northern Ireland has been issued. The list of Pharmaceutical Chemists is longer by two pages than in the previous Register. All sections are revised to December 31, 1939.

Dispensing for Members of the Forces on Leave.—The Ministry of Labour asks Northern Ireland chemists to dispense prescriptions written by local doctors for members of the Forces on leave; the prescriptions will be paid for at N.H.I. rates, and each one should be presented for payment to the local doctor whose signature it bears.

Air-raid Casualties Treatment Scheme.—A scheme for provision of medical attendance at home for air-raid casualties in Northern Ireland has been arranged. Medicines will be ordered on National Health Insurance forms marked "War Casualty," which are returned with ordinary N.H.I. prescriptions to be priced and paid for at N.H.I. rates.

Dublin Strike Averted.—The possible closing down of wholesale drug houses in Dublin on March 11 as the result of strike action on the part of their employees has been averted for the present. The workers concerned, who are members of the Irish Transport and General Workers' Union, held a meeting on March 10 and decided to withdraw their strike notices pending a conference to be held on Wednesday under the auspices of the Department of Industry and Commerce, at which both the employers and workers will be represented. In the statement issued by the Irish Drug Association (Wholesale Section) published in the *C. & D.*, March 9, p. 178, it was inadvertently stated that the workers' annual holidays were one week with

full pay. The holidays given are two weeks with full pay, addition to all public holidays with full pay.

Labelling Offence.—Richard Downes, labourer, No. 1 Circular Road, Dublin, was recently fined twenty shillings for having sold a poison in a preparation not distinctly labelled with the name of the article and the word "poison." Defendant admitted advertising and selling an ointment which he had made and which, he said, had been made by members of his family for generations. The ointment contained red oxide of mercury as a preservative. He undertook not to use it in the ointment in future. The prosecution was brought by the Pharmaceutical Society of Ireland.

Portadown Chemists Meet.—Visitors from Lurgan, and deputation from the Ulster Chemists' Association that had come to give an address on the Chemists' Friends scheme, were welcomed by Mr. W. F. Pedlow (chairman) at a meeting of the local Association on February 20. Mr. E. A. Richey, who delivered the address, traced the origin of the scheme, and outlined progress made during its existence. The outbreak of war had delayed extension of the scheme to Northern Ireland, but arrangements were now almost completed, and he asked for whole-hearted support for manufacturers—there were now more than a hundred who had placed their goods on the C.F. list. Mr. John McDowell (president, Ulster Chemists' Association) hoped the meeting would be the first of many in the six Counties. The U.C.A. would welcome suggestions and information from country members who, owing to present difficulties, could not be adequately represented at meetings of the executive committee. Mr. McClenahan (secretary, U.C.A.) spoke of the Association's work and stressed the need for loyalty and goodwill. Discussion of the C.F. scheme and on matters of local interest was continued by both Lurgan and Portadown members until supper was ready.

Three Hundred at Belfast Whist Drive.—The Belfast ladies' pharmacy social committee held a successful whist drive in the Grand Central Hotel, Belfast, on March 7, in aid of war efforts and the chemists' Benevolent Fund. The guests numbered about 300. Mr. Fred Storey (chairman, Benevolent Fund committee) was M.C., and Messrs. T. Nicholl, J. McGregor, Abernethy, and R. Guiler acted as stewards. The committee in charge of the arrangements included Mrs. McGregor (chairman, the Misses Crawford, Ph.C. (treasurer), and Forrest, Ph.C. (secretary), the Mesdames Martin, Storey, Abernethy, N. H. Ph.C., McDowell, Maguire, Ph.C., and the Misses Laverty, Ph. Barry, B.Sc., Ph.C., Murray, Ph.C., Marshall, Ph.C., and McCoskey, Ph.C. The prizewinners were:—*Ladies:* 1, M. Moss; 2, Mrs. Dobson; 3, Miss Thompson. *Gentlemen:* 1, J. Moore; 2, Mrs. McClatchey (playing as gentleman); 3, Finlay. Half-time score: Miss McCouig and Mr. G. McGowan. Hidden number prizes: Mrs. Henderson and Mr. C. Lord. Consolation Prize: Miss Clokey. The ballot was won by Miss Barry. Mr. Storey congratulated the committee on the success of the function, and proposed a vote of thanks to them and to their chairman (Mrs. McGregor). Prizes were provided by The British Drug Houses, Ltd.; Ayrton, Saunders & Co., Ltd.; Thomas Waide & Sons, Ltd.; Bourjois, Ltd.; Morny, Ltd.; Coty (England), Ltd.; S. Haydock & Co.; Glaxo Laboratories, Ltd.; and J. C. Gambles & Co., Ltd. (Cutex).

Ulster Chemists' Association.—The monthly meeting of the executive committee was held on March 5, the president (John McDowell) in the chair. There were also present Messrs. J. Dundee, A. T. Hardy, J. McGregor, W. J. Rankin, E. Richey, and A. Wilson. A vote of sympathy with Mr. E. Roberts, Ph.C., on the death of his son, Mr. Herbert Roberts, Ph.C., was passed.

The president reported on a meeting in Portadown which, with Mr. E. A. Richey and the secretary, had attended a deputation from the Association. Mr. Rankin urged that similar meetings in other centres would strengthen the Association. Mr. Richey and Mr. Rankin reported that they, with representatives of the Pharmaceutical Society, had attended a meeting at which it had been decided to postpone arrangements for an annual dinner; the meeting had recommended that a committee should be appointed to meet in the autumn and make arrangements for a function early in the New Year. The secretary reported that the Chemists' Friends Association had received applications for wholesaler membership from three firms in Northern Ireland, and was in correspondence with a fourth.

The scheme would shortly be in full operation. The secretary reported that the response to the president's letter to non-members, inviting them to join, had been encouraging. The Association was now stronger than ever before, and it was apparent that the advantages of membership were being realised; the weekly issue of price alterations (1,500 since the beginning of the war), was itself a sufficient reason for inducing many to join. The Association's efforts in expediting the scheme for sugar supply for pharmaceutical purposes had been successful. A further increase in membership during the next few weeks could be confidently expected, as personal calls following on the president's letter showed that many were willing to join when asked to do so. The secretary was instructed, in the weekly communication sent to members, to urge that all should adopt the practice of coding. The secretary reported that window transparencies ordered the previous month had now been delivered, and one would be sent to each member during the next few days. It was decided that the advertising committee should be given power to adopt wordings for the showcards at present on order, and to forward copy to the printers without further delay. A number of accounts were passed for payment, and numerous price changes were considered and adopted.

Photographic Dealers' Annual Meeting.—Mr. G. A. MacLean, M.P.S.I. (chairman), presided at the annual meeting of the Eire Branch of the Photographic Dealers' Association held on February 28. Reviewing the year's work, he said the name of the Branch had been altered from Dublin to Eire Branch, and it now represented dealers in the entire twenty-six counties. Membership had been well maintained, but there were still a number of dealers outside the Association. The secretary visited among other centres Cork and Waterford, and as a result a number of new members had been obtained. During the year Dublin had been appointed a centre for the P.D.A. examinations, and they had been honoured in having the president of the Association (Mr. Harry Mottershaw) sent as examiner. The Branch had again co-operated with the "Irish Press" in running a newspaper snapshot competition, but results had unfortunately been affected by the bad season, due first to bad weather, and secondly to the European crisis. Amongst matters dealt with by the committee was a case of irregular trading in a country town. The Branch had submitted evidence on behalf of photographic dealers to the Vocational Organisation Commission set up by the Eire Government. Cut-price developing and printing had been considered from all aspects, and the committee was now co-operating with the Irish Drug Association in an endeavour to fix a uniform price for the Dublin area. The Branch had been responsible for tabling a motion on this subject at the I.D.A. annual meeting, and looked for loyal support from all members in bringing the matter to a satisfactory conclusion. He thanked members for letters of appreciation sent in.

Mr. P. A. Brady, M.C.P.S.I. (treasurer), reported that the total income for the year came to £38 6s., made up of £25 17s. 6d. received from headquarters as refund of 2s. 6d. on every subscription received, plus £12 8s. 6d. carried forward from the previous year. Expenditure came to £37 13s., leaving a credit balance of 12s. to be carried forward. Membership stood now at 207, compared with 237 in 1938; they hoped for a slight increase this year. On the motion of Mr. A. J. Donnell, seconded by Mr. F. McGrath, the treasurer's report was unanimously adopted. Out-going committee members were unanimously re-elected on the motion of Mr. Lyall Smith, seconded by Mr. J. J. Stafford. Mr. Lyall Smith (secretary) reported that the position throughout the country seemed good, especially in Cork. In a few places he had visited the sale of films by non-dealers in small places, particularly in seaside stores, had been mentioned, but such sellers were dealers' agents, and not all of them were selling standard films. The committee would have to bring these people into line, either by having them appointed dealers' agents by some other method. The D. and P. prices position throughout the country was on the whole good, the recommended scales being generally adhered to. Cork gave one hundred per cent. support, the only trouble in that part of the country coming from Fermoy. In Kilarney there had been some price cutting, but as a result of action taken by the Branch agreement had been reached to maintain the recommended scale of charges; he had since learned that the agreement was being loyally carried out by all. Certain dealers he had met were of opinion that more newspaper and poster advertising should be done by the manufacturers to popularise winter' and night photography. Broadcast talks on photography had also been suggested. Price

cutting in D. and P., which was now confined to the Dublin area, formed the subject of special action now being taken by the I.D.A. Circulars suggesting a fixed scale for this season had been sent out, and of the replies so far received over ninety per cent. were in favour of the suggested scale. Mr. Smith's report was followed by a discussion on D. and P. prices.

SCOTLAND

Business Changes.—A pharmacy and drug department is to be opened shortly in Hamilton by the Hamilton Central Co-operative Society, Ltd.—The Tweedside Industrial Co-operative Society, Ltd., has recently opened a pharmacy in Tweedmouth.

Old-established Business for Sale.—The pharmacy and optical business of M. G. & A. St. C. Boag, 61 Montrose Terrace, Edinburgh, is being offered for sale. A similar business has been carried on in this position since 1865. Mrs. Anderson (née Miss M. E. Boag), the present proprietor, contemplates retiring.

Galashiels Firm's Centenary.—B. Cartwright & Son, chemists and opticians, 50 High Street and 45 Bank Street, Galashiels, celebrate their centenary this year. The business was founded in 1840 by Mr. John Mackay. In 1881 Mr. Mackay disposed of his Galashiels branch to Mr. James Walker, who in 1893 was succeeded by Mr. Benjamin Cartwright, the present principal. Mr. Cartwright had previously spent a number of years as assistant with the Glasgow Apothecaries' Co.

War-time Conditions Discussed in Edinburgh.—A meeting of the Edinburgh and South-Eastern Scottish Branch of the Pharmaceutical Society was held in Edinburgh on February 28, Mr. James Henry in the chair. The chairman said members would appreciate that owing to the black-out and severe weather conditions the committee had felt that an earlier meeting was not warranted. He hoped Dr. Tait, whom he called upon to address the meeting, would be able to give some cheering information on "War-Time Conditions in Pharmacy." Dr. Tait explained the formation of the Scottish Central Pharmaceutical War Committee and referred to the five local war committees that had been set up. He outlined the work that had been carried out, including compilation of a National Register of pharmacists, dispensing of medicines for evacuated children and for men in H.M. Forces on leave, domiciliary treatment of casualties, and dispensing of prescriptions for auxiliary hospitals. He referred to voluntary help pharmacists had been able to give in connexion with supervision of hospital supplies, storing and transport of drugs, and other work. Education and examination problems arising out of war conditions included suspension of the Higher School Leaving Certificate and issue in its place of a Senior Leaving Certificate; the question was being considered by the Council.

MR. SOMERVILLE, Edinburgh, referred to directions issued to first-aid posts on making-up of solutions, etc.; many of these, he said, were wrong, and the matter should be looked into. MR. DRUMMOND, Edinburgh, said he had dispensed a war-service prescription for a soldier who lived quite near a military hospital, and he thought a war-service prescription should not have been used. MR. BAYNE, Kirkcaldy, objected to a paragraph in the circular issued to chemists on this subject. In this it was stated that the doctor must arrange with a chemist for dispensing such prescriptions. This would mean that the patient had no free choice of chemist. MR. SOMERVILLE suggested the difficulty might be overcome if the doctors in a town had an agreement with all chemists. MR. BAYNE also mentioned that pricing of the prescriptions had to be done by chemists, while in all other schemes it was undertaken by the Checking Bureau, but MR. NISBET, Leith, said he understood the Checking Bureau would, if requested, price the prescriptions without charge. MR. FINDLAY, Edinburgh, asked when Edinburgh chemists would revert to the 7 o'clock closing hour, and MR. DRUMMOND said the emergency closing hour would remain in force until March 18, after which date hours in all types of businesses would revert to normal. He thought the whole question should be gone into with a view to adopting an earlier closing hour for the future. DR. TAIT said confusion had arisen as to the source of forms for sugar supplies. In Scotland, if it was desired to get sugar from a retailer, the necessary form could be obtained from Mr. H. Graham Macmillan, Scottish Pharmaceutical Federation, 65 Renfield Street, Glasgow, C.1; if from a wholesaler, application to apply to the Local Control Office was necessary. On the motion of the chairman a vote of thanks was accorded to Dr. Tait. Mr. Tainsh moved a vote of thanks to the chairman.

COMPANY NEWS

P.C. means Private Company and R.O. Registered Office

BOTTLE PATENTS, LTD. (P.C.).—Capital £5,625. Objects: To acquire and turn to account licences, concessions and secret processes relating to bottles, packages, containers and receptacles, and to carry on the business of manufacturers of and dealers in fittings, accessories and enclosures to bottles, packages, etc. Cyril G. Blaxter, 75 Chester Square, London, S.W.1, Edmund J. Goemans, 33 Palliser Road, W.4, Vernon S. Wright, 13 Ashburn Gardens, S.W.7, Lilian F. Stoop, 33 Palliser Road, W.4, directors. R.O.: Broadmead House, 21 Panton Street, Haymarket, London, S.W.1.

OLIVE OIL IMPORTERS' ASSOCIATION, LTD.—Limited by guarantee. Objects: To make and give effect to arrangements that may be entered into with the Government department having control or organisation of food supplies of the United Kingdom, relating to the purchase, sale, realisation, distribution and dealing in articles in respect of orders under any defence plans or regulations which have been or may be issued by such department. The management is vested in a committee, the first members of which are to be appointed by the subscribers. One member is to be nominated by the Government department. Solicitors: Roney & Co., 42-45 New Broad Street, London, E.C.2.

CHESEBROUGH MANUFACTURING CO., LTD. (P.C.).—Capital £1,000. Objects: To acquire from the Chesebrough Manufacturing Co., Consolidated (a company incorporated in New York), the business hitherto carried on by them in the United Kingdom of Great Britain and Northern Ireland, and to carry on the business of manufacturers, producers, distillers, refiners, purifiers, importers, exporters, buyers, sellers and distributors

of and dealers in petroleum jelly, petroleum and petroleum by-products of all kinds; pharmaceutical, consulting, analytical, manufacturing and general chemists and druggists, etc. The first directors are to be appointed. Solicitors: McKenna & Co., 31-4 Basinghall Street, London, E.C.2. R.O.: Victoria Road, Willesden, London, N.W.

HORLICKS, LTD.—Interim dividend of 13½ per cent. actual, less tax, payable to stockholders registered on March 14, 1940, has been declared.

EVANS SONS LESCHER & WEBB, LTD.—The directors' report and accounts for the year ended December 31, 1939, show that mortgages and credit notes issued to bankers have been reduced by £7,500 and £4,439 respectively. Mortgage and leasehold redemption account is augmented by £2,325. The trading profit amounted to £66,036. The amount transferred to balance sheet is £30,984, to which is added the balance brought forward from 1938, £11,048, making an available balance of £42,032, which the directors propose to apply as follows: Transfer to general reserve, £15,000; payment of one-and-a-half year's dividend on the 6 per cent. preference shares (less tax), £14,147, leaving a balance to be carried forward of £12,885. Messrs. J. H. E. Evans and J. W. Wright, retiring directors, offer themselves for re-election.

BANKRUPTCY.—Mr. Charles Henry Bullock and Mrs. Emily Stewart Bullock, 41 Grove Road, Leighton Buzzard, drug-store proprietors.

TOPICAL REFLECTIONS

Local Public Expenditure

Your trenchant editorial remarks on the position of owners of businesses in relation to rating (p. 185) put the matter in its true perspective. When, in any household, a sudden blow falls—a prolonged illness, a financial reverse, or some other misfortune—the domestic arrangements have to be drastically reorganised; the garment has to be cut according to the cloth. Yet in the average municipal or rural council there seems to be, so far, a very imperfect realisation of the exigencies, present and prospective, of this war. So much is this the case that when we read, as occasionally we do, of a reduction in the rates for the next half-year, we are surprised. There seems to be a vague idea in the public mind that there is plenty of spare money somewhere, in spite of the colossal taxation that lies heavy on us, and that any Government imposing such burdens can afford to disburse something for the relief of local public bodies. Surely this is a mischievous delusion. Local councils, urban and rural, will have to practise economy for much the same reason as private citizens are practising it. A beginning may well be made with municipal services that are being run at a loss, including those that compete with ordinary trading. Your presentation of the case for a reduction in assessments is sound. The periodical forcing up of assessments by local committees is notorious, and in some instances the present figures would be difficult to justify even in peace-time.

Prices of Pre-war Stocks

The brief comment on p. 186 regarding the retail sale of goods purchased at pre-war prices calls attention to a problem likely to trouble retailers for some time to come. A retail chemist may have in stock through no fault of his own (if the expression may be allowed) an unusually good supply of some chemical or galenical purchased, in the ordinary way of business, at a moment when the pound or hundredweight price of it was a few pence lower than usual. Obviously, he can do one of three things: continue to retail at the old price, retail at a higher price, or—as is said to be happening—get rid of his stock by a special type of sale. If he adopts the first course, he may be designated a cutter by his competitors; if he adopts the second course, he may be challenged by a price regulation committee. He will save himself a certain amount of worry if he chooses the third course. But I must not be understood as dogmatising: every retailer must map out his own course.

A "Protective Device"

The report of a meeting of the British Standards Institution on p. xiv of your last week's Coloured Supplement includes the surprising statement that "the anti-gas ointment would be regarded as a protective device rather than a medicinal device." If this view is to be authoritatively upheld, it will, among other things, effectively prevent any prosecution in respect of alleged deficiency in the composition of this ointment, for it is difficult to imagine a protective device being legally regarded as either a food or a drug. True, there are the provisions of the Merchandise Marks Act to be considered; but a charge of giving a false trade description would presumably need to be substantiated by showing that the protective device in question did not, in fact, protect, and for this purpose experiments on human subjects would be almost indispensable. The situation is a curious one. One may ask whether all prophylaxis is not of the nature of a protective device and, if it is, whether any of it falls within the province of medicine. Everything so used, from a simple formalin gargle to the most elaborate toxoid, might well be claimed, *ex hypothesi*, as a substance to be standardised without the guidance of either medicine or pharmacy.

Accurate Weighing

The paper on variation in weighing, contributed at an Edinburgh meeting by Mr. William Brown and Professor James P. Todd (p. 181), is not the first, and will probably not be the last, on this subject. Although analytical precision is not the aim at the dispensing counter, everyone needs to realise the implications of an inquiry of this kind. The classic on comparative weighings in a matter of national importance, the making of a new standard pound, is still, I believe, the late Professor W. H. Miller's paper in Volume 146 of the "Philosophical Transactions of the Royal Society" (pp. 753-946), a record of experiments involving hundreds of weighings and calculations. As a matter of fact, the standard of the year 1844, according to the data then available, weighed 0.00093 gr. more than its theoretical 7,000 grains. It would be of interest to know whether Mr. Brown and Professor Todd have investigated variations in weighing other powders: potassium iodide, however finely powdered, is hardly to be regarded as a representative substance for division into "papers." It may be remarked that the apprentice's pastime of guessing divisions is not one to be encouraged.

Xrayser

PHARMACEUTICAL SOCIETY'S EVENING MEETING

At an evening meeting of the Pharmaceutical Society of Great Britain, at Bloomsbury Square, London, W.C.2, on March 12, Mr. W. Deacon (the president) in the chair, Mr. Walter P. Kennedy, L.R.C.P., L.R.C.S., a member of the Poisons Board, gave an address on

Some Aspects of Drug Addiction

[ABSTRACT]

In this address, the word "drug" will be used in its wide sense, and not limited to the narrow categories "dangerous" or "narcotic." It is true that the great majority of cases of addiction are to drugs in these classes. Some other examples with quite different substances will be instanced. The original use of the word "addiction" in Roman law meant the formal handing over by a court. This developed into the conception of being "bound to a master," and thence we have its modern meaning of using a drug in excess of the medical indication and in response to a craving which the drug itself induces or increases.

A topical and important aspect of drug addiction is the problem of marihuana. This is the name by which the hemp plant *Cannabis sativa* is known in the United States. In Oriental countries, use of cannabis as hashish (generally smoked), bhang (drunk), charas (usually eaten), and many other names, is ancient and widespread. In the United States marihuana seems to have been first introduced in Louisiana about thirty years ago, probably from Mexico or Central America. It was cheap and the abuse spread even amongst school children, till it was not long before the public conscience became aroused as to the dangers of this vice. At first gradually, and then more rapidly, marihuana spread throughout the States of the Union, and the gravity with which it is regarded may be measured by the penalties inflicted for traffic in this drug. The seriousness of the problem is due to the fact that marihuana is destructive of the moral sense. Unfortunately it appears that initiates are much more readily won over to the seductions of "Mary Jane" or the "reefer" cigarette than is the case with the majority of drugs. While the effects are varied from individual to individual, they are generally characterised by hallucinations of space, time, and frequently colour.

Every effort is made by the South African authorities to stop indulgence in dacha, which is by far the most prevalent addiction in the country, but, as in the U.S.A., the ease with which the weed grows adds to the difficulty of stamping out the vice.

MESCAL AND ETHYLMORPHINE

Another exotic drug which has lately found its way to Europe—though, so far as I know, not to Britain—is mescal or peyote, a cactus from Mexico, which contains several alkaloids. It is neither euphoric nor narcotic (though included in the latter category in the U.S. Federal Legislation), but it is an inebriant producing even more brilliant and prolonged hallucinations than does hashish. The Aztecs used it in their religious ceremonies, probably with some idea that the visions were a sort of contact with the gods. It also produces a strange sensation, as if one were dematerialised. But, as with all such vices, the consequences are severe. The acute effects are vertigo, severe headache, nausea, confusion, distorted sight, and profound disorientation in time. Chronic users suffer mental, moral, and physical deterioration and become useless and unable to work.

In recent years chemists have derived a large number of new substances with medical uses, and synthesised others. Amongst these are a number with narcotic properties, and it has often been claimed that the new narcotic was one free from the dangers of producing addiction; indeed, some have been advocated as substitution cures for morphinism. Some years' experience of a new remedy is, however, necessary for its proper assessment (witness the case of amidopyrine, which was considered safe for years before it was discovered it could cause agranulocytosis). By no means all users of a drug are liable to become addicts, and some time often elapses before the capacity of the drug to produce a craving is recognised. Ethylmorphine is such an example, and it is only lately that it has been recognised as capable of producing addiction. Another interesting example is that of codeine, which is not generally recognised in this country as being a drug of addiction, but in Canada its misuse provides a real problem, and has resulted in special legislation, and this is also the case in Germany.

UNUSUAL ADDICTIONS

We might now turn to consider some unusual addictions and borderline cases, and amongst these one of the most interesting is the misuse of tea. I first came across this in a remarkable tale, "Green Tea," in a book "As in a Glass Darkly," by J. Sheridan Le Fanu, and thought no more of it than as being an excellent piece of fiction until I was assured by a Chinese pharmacologist that in his country intoxicating effects from the excessive use of certain teas were well recognised. Then when a medical student I heard from Dr. John Orr of tea-eating, of which he had seen cases in the Midlands. They were invariably women, and the intoxication produced was a very violent one, an inebriation without any euphoric character. The tea was apparently chewed as a cheap substitute for alcohol.

An interesting series of cases have been quoted by Patterson with reference to excessive use of endocrine products, for example, the fashion which swept through a certain girls' school of taking thyroid for the purpose of securing lithe figures. This is a borderline example since the thyroid could hardly be said to cause a craving in itself. Patterson's series of "adrenalism" cases are perhaps more nearly true addicts. Tremendous amounts were taken by some, for example, 31,000 doses each of a milligram over a period of thirty years; suicide followed on the patient being deprived of adrenalin.

It may surprise some if I refer to aspirin as a drug which gives rise to habit, and without being dogmatic I would merely give my opinion that it does, and add that I am not without some support. An American professor of medicine said to me that one of the things which struck him most forcibly in a first visit to this country was the tremendous amount of aspirin taken by women and young girls.

Coffee has sometimes been regarded as giving rise to addiction and this may perhaps be justifiable. In Iraq coffee is taken in two ways. In the towns it is generally drunk in the Turkish style, that is in small cups, highly sweetened, and almost half full of grounds. Amongst the Bedouins the coffee is boiled for a very long time, perhaps overnight, and taken without sugar in three successive doses of between one and two drachms. This is followed by a drink of cold water. I have never indulged in this type of coffee to excess myself, but friends of mine who have assured me that it has a real "kick," if I may be permitted a slang term for which there is no exact scientific equivalent.

The craving for alcohol is an all too familiar example of drug addiction and from it there are some interesting off-shoots which may be noted. It is sometimes taken in unusual forms, for example a pharmacist of my acquaintance had a profitable woman customer who bought a bottle of eau de Cologne every day which he thought she was probably using somewhat extravagantly in her bath. However, one day her husband appeared and asked the pharmacist not to supply any more eau de Cologne as his wife was drinking it, and had been doing so for some time, changing her pharmacist as her husband caught up with the source of supply. A not unimportant form of addiction is provided by certain medicated wines and proprietary preparations which do not disclose the fact that they contain alcohol.

Ether has been used for its intoxicating effects and several cases are recorded in which it has given rise to true addiction. It is perhaps more commonly met with as an occasional indulgence.

In various parts of the world many other plants have been used for their effects on the mind, such as datura, hyoscyamus, betel nut, kola nut, banisteria and many others.

Discussion and Vote of Thanks

The Chairman then threw the meeting open for discussion. Mr. H. DEANE said a student of his had tried the effect of *Cannabis indica* but without result; was this due to an idiosyncrasy or to an old sample? Dr. KENNEDY replied that *Cannabis indica* frequently affected different people in different ways. Mr. GARTSIDE mentioned the extreme violence noticed in methylated spirits drinkers and asked if this was due to the alcohol or to other products in the spirits. The lecturer replied that the effect was possibly due to the denaturant substances.

A vote of thanks was proposed by Mr. A. R. Melhuish and seconded by Professor E. C. C. Baly.

"THE ART OF DISPENSING" AND A BEST SELLER

WHEN the popular writer brings pharmacy into his or her books the pharmaceutical reader is usually most interested and amused by the howlers which are perpetrated. The words:—

Strychnine sulph.	..	..	..	gr. i
Potass. bromid.	..	..	..	5 vij.
Aquam.	..	..	..	ad. 3 viij.

This solution deposits in a few hours the greater part of the strychnine salt as an insoluble bromide in transparent crystals. A lady in England lost her life by taking a similar mixture: the precipitated strychnine collected at the bottom and in taking the last dose she swallowed nearly all of it.

fairly leapt from the printed page and they galvanised into action a mind which was almost dreamily following the words of Hercule Poirot as he explained how a particularly clever murder had been committed. It was unnecessary for the reader to continue to the end of the quotation, the words were perfectly familiar and, when opportunity offered some hours later, without consulting the index, he opened "The Art of Dispensing" at the chapter on "Incompatibles" and the accuracy of the transcription was checked.

In "The Mysterious Affair at Styles," Agatha Christie has written her mystery round the above paragraph from "The Art

of Dispensing" and, as might be expected, since she has so excellent a mentor, her pharmacy is sound. Her forensic pharmacy is not quite so accurate, since a qualified chemist is made to admit long before the passing of the Pharmacy & Poisons Act, 1933 that he sold strychnine to an "unauthorised person," and was censured by the coroner for so doing, although according to the evidence the purchaser was known to the seller, the poison bottle was duly signed and the purpose for which the poison was stated to be required correctly entered. Why "unauthorised" and why the "few words of stern censure" with which "the coroner dismissed the wretched Mr. Mace"?

There is a young lady who dispenses medicines amongst "hundreds and hundreds of bottles" and "knows what is in each of them" and photographs are taken of fingerprints on a bottle containing strychnine hydrochloride which we are told is "used very little—only occasionally for pills. It is the official solution, liq. strychnine hydrochlor. that is used most in medicines." The pharmaceutical Latin is not good either here or in the quotation (not quite correctly rendered in the story from "The Art of Dispensing," but the mystery is a profound one and will probably defy the most perspicacious disciple of Galen until he comes to the last few pages.

HALF A CENTURY AGO

MR. CHARLES E. DODSLEY, who qualified as a chemist and druggist in 1886, sends us the following account of trade conditions in his early days:—

Apprentice Days

My first job as apprentice was to beat up a 7-lb. pill mass in one of the huge Italian marble mortars now rarely seen, using a pestle weighing 4 or 5 lb. I was not entrusted with the ingredients, which were weighed and mixed by the assistant, but I well remember how my arms ached after a morning's work. I see, almost as clearly as when I was an apprentice, the commodious stock held in the three-storeyed, dormer-windowed, old building and outhouses where my early business days were spent. The outer walls were two feet thick, and the roomy built-in cupboards were crammed with a heterogeneous conglomeration of goods. In those days, drug travellers called once in three months—a contrast to present conditions, in which three or four local houses can be relied upon to ring up daily for orders, and when stocks held are, by comparison, small. In my apprentice days we did a good deal of business with country shopkeepers, and in my time I packed many gross of penny packets of baking powder and became an adept at pill making. I think the only job I strongly disliked was sieving sulphur and powdered hellebore for a mixture used in sheep dipping. I took the precaution of inserting a chamomile flower in each nostril, replacing it at intervals with a fresh flower during the making of a batch of 28 to 56 lb. Chloride of lime, too, was unpleasant to handle, but at that time it was almost the only disinfectant in general use in the ash-pit privies that were the means of sanitation in most of the houses of those days.

Stocks

In the oil warehouse were ranged six 40-gallon barrels containing raw linseed oil, colza oil, turpentine, whale oil and Gallipoli oil, the last-named being a paraffin lubricating oil of deep, reddish-yellow colour and reddish bloom. Paraffin oil for lamps, and benzoline, were both kept on tap in an out-building across the yard. This building was kept always locked. The cask of olive oil was in the room behind the shop, where also were housed such items as whiting in 2-cwt. sacks, lime blue, brown umber and Venetian red, used for colour washes. A considerable trade was done in these commodities, most of the local cottages and smaller houses being white or colour-washed. Oxford ochre and red raddle were kept in blocks for sheep marking and white lead, stiff paints, red lead and orange lead in powder were kept in metal drums. Ready-mixed paints were a later innovation, so that in the spring-time paint-mixing was a regular part of each day's work in the shop. In the dry room were stored bales, sacks and casks of such items as chamomile flowers, senna leaves (the pods were not then sold), Irish moss, locust pods, dog biscuits of the large kind, shellac, resin, tartaric acid, cream of tartar, etc., and in three large barrels hemp, canary and rape

seeds. My last job before going into business on my own was with a firm which had a dozen shops in an industrial area in the north, and packed its own brand of chloride of lime. Air-proof bags for the purpose were made from paper saturated with boiled linseed oil. The chloride of lime came in 5-cwt. casks, and the packing was done in a disused stable by an old soldier. The packer brought in a daily chit of work done, and on most days drew an advance on the amount due—to slake a not inconsiderable thirst. It was in a shop in a busy seaport in the north that we filtered our own cod liver oil. A small cellar, shut off from the basement, was used for this purpose, and a huge white felt bag capable of holding eight to ten gallons was suspended from the ceiling. Throughout the season it was kept continuously in use for filtering oil obtained from the local fishermen. We had also a substantial sale for black ink, which was supplied to all the schools in the town. A percolator was in constant use for this purpose. Each charge of logwood, galls and ferrous sulphate produced two gallons of excellent black ink, but towards the end of my three years' service there was a change-over to a non-ferrous formula. An article in periodic demand by fishing boat owners was cutch, used for tanning sails, nets and tackling.

Studies

During my three years at this shop I made a collection of 12 flowers, which I pressed and mounted. These proved later a distinct help to my fellow students at Wills' college of pharmacy in South-West London. Study for the "Minor" by students other than those employed in London was in most instances not possible by means of a correspondence course. There was a good and up-to-date mechanics' institute in my own town, with a small chemical laboratory of six benches, but no classes were held. I rented a bench during the winter months, and in the evening did practical work alone. Water and gas were laid on, but there was no fume chamber or apparatus of any kind. Amongst materials I ordered from Maw, Son & Thompson, London, was "a small square of platinum foil." They supplied a piece about four inches square, the cost of which would have crippled my slender finances, and I promptly returned it. Fortunately, they exchanged it without question for a piece one-and-a-half inches square. I passed the "Minor" at first attempt, my examination being, for materia medica, Bengier; for botany, Corder; for chemistry, Thresh; and for dispensing, Greenish.

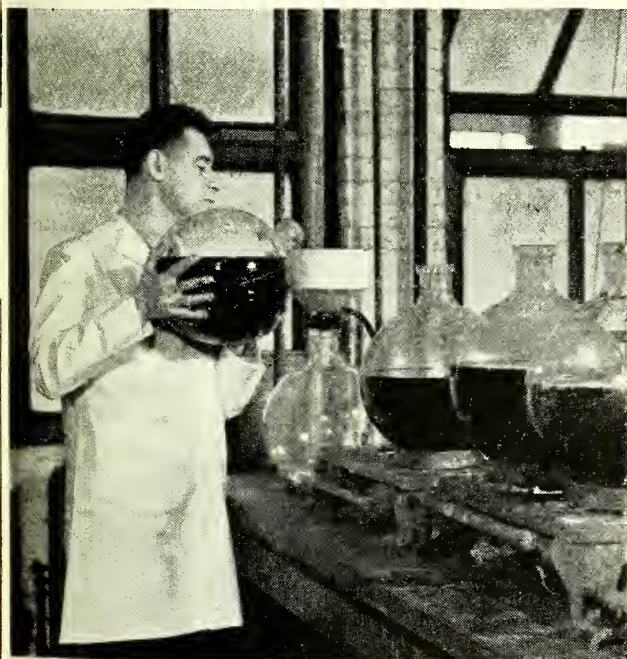
During the half century or so during which I have been associated with the drug trade, many household commodities originally made and sold by chemists and druggists have come to be marketed and advertised under trade names. Some of these proprietaries the pharmacist today does not even stock; for example, articles in everyday use such as baking powder, furniture pastes and creams, french polish, wood stains and varnishes, paints, ginger-beer powders, lemon kali, salad dressing, relishes and sauces, condition powders, black oils, white oils and other preparations for veterinary use.

UNITED STATES CYSTINE PRODUCTION

Cystine, a compound obtained from hair, feathers, and other keratinous materials, has applications in cancer research, and substantial quantities are required for this purpose in the United States. To meet the demand, these materials are collected from throughout an extensive area by the Paul-Lewis Laboratories, Milwaukee, Wisconsin, by whom it is treated as shown in the accompanying illustrations. The process consists essentially of hydrolysis, precipitation and subsequent purification.

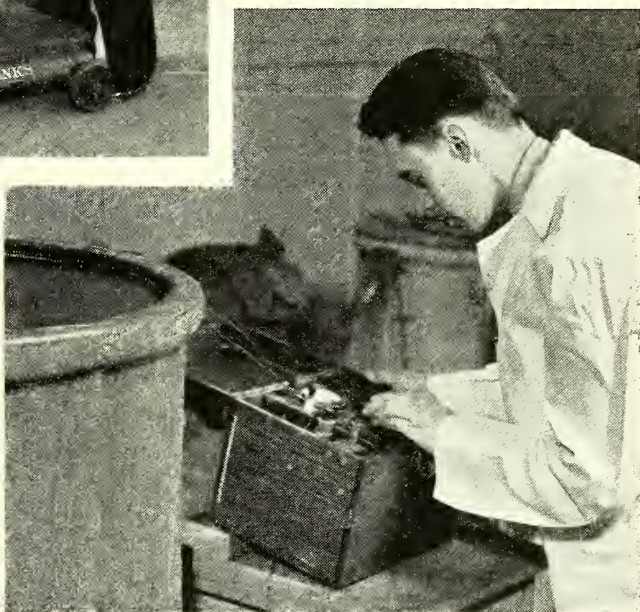


A heap of human hair ready for hydrolysis. Into a 50-litre heat-resisting flask 30 lb. of hair (representing some 2,000 hair-cuts) is weighed prior to a ten-hour boiling with hydrochloric acid. A battery of flasks is heated simultaneously. After boiling, the acid-hair mixture is cooled and passed through a filter press, from which it emerges as a clear amber liquid. The filtrate is treated with sodium hydroxide solution in a 100-gallon jar.

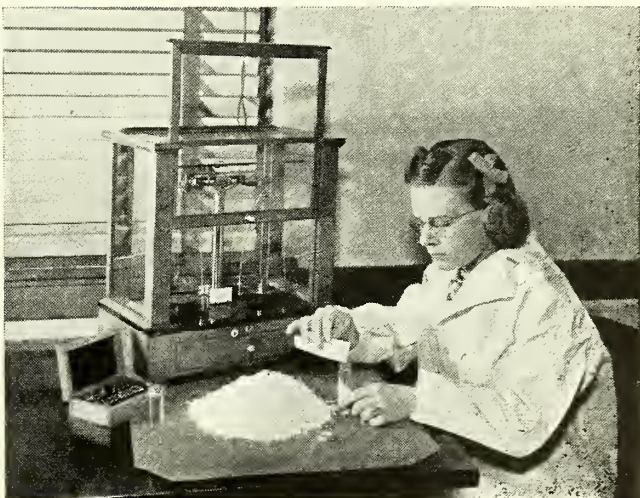


After separation from the mother liquor, the sludge is redissolved in acid and clarified by means of activated charcoal. Fifteen operations are needed for complete purification. At the last stage the solution is water clear and the cystine is precipitated with sodium acetate. The pure precipitate is then separated and dried.

Right: The yield from one flask is shown being filled into phials for dispatch to cancer-research institutes.



Testing for pH of the filtrate. At the correct point neutralisation is discontinued and a thick, brown sludge of crude cystine separates out.



MANCHESTER TESTING HOUSE

THE annual report for the year 1939 of the Manchester Chamber of Commerce Testing House and Laboratory states that the laboratory can now handle three times the number of samples that could have been dealt with only a little over a year ago, while reports on tests are issued within twenty-four to thirty-six hours of receipt of sample. When hostilities broke out steps were taken to remove a proportion of the plant and part of the staff to other quarters provided by the British Cotton Industry Research Association, and matters were so arranged that work could go on practically uninterrupted even if one of the stations were put out of action. In nearly all work not of purely routine character that is carried out in the laboratory a considered opinion upon the outcome of the examination is required. The numbers of such special investigations of surgical dressings in recent years have been, in 1937, 1183; 1938, 1277; and 1939, 1109.

During the twelve months from August 1938 to July 1939 the largest number of surgical dressings ever submitted for analysis under the National Health Insurance Act in any twelve-month period was dealt with. The proportion found to be deficient is compared in the following table with the figures in previous years:

Period August to July	Dressings in original sealed packets			Dressings not in original sealed packets		
	Total	Deficient in		Total	Deficient in	
		Quality	Quantity		Quality	Quantity
1930-1931	1067	117 (11.0 %)	25 (2.3 %)	55	12 (21.8 %)	6 (10.9 %)
		66	22	18	5	1
1933-1934	1042	32 (3.1 %)	24 (2.3 %)	17	2 (11.8 %)	2 (11.8 %)
		54	28	25	5	1
1937-1938	1053	51 (4.8 %)	12 (1.1 %)	56	13 (23.2 %)	2 (3.6 %)
1938-1939	1117	56 (5.0 %)	16 (1.4 %)	39	13 (33.3 %)	4 (10.3 %)

In the course of the work it was necessary to draw attention to many deficiencies, including the following. Samples of white and boric lints contained fewer weft threads than the standard, or were insufficiently or irregularly raised, thus preventing the material from tearing as easily as required. Cotton wools were found to be less free from "neps," leaf and shell, than they should be. Dressings lacking in absorbency were found, some taking several hours instead of ten seconds to sink in water. Other materials, chiefly bandages, yielded two or three times the permitted amount of foreign matter. The percentages of medicament found in certain dressings varied from heavy excesses to extreme deficiencies: there were thus 55 per cent. of boric acid, instead of 35-45 per cent., in a sample of boric lint; 1 per cent. of talcyanide, instead of 2-4½ per cent., in a sample of double cyanide gauze; and an imperceptible amount of iodoform, instead of 4 to 6 per cent., in a sample of iodoform gauze. Adhesive-coated or rubber- or oil-proofed appliances were found deficient in coating or proofing, some to the extent of 40 per cent., whilst the fabrics used were sometimes deficient in weight to the extent of 20 per cent. Isolated irregularities discovered were pieces of coloured thread, hard bast fibres, and 25 per cent. of rayon fibre in three samples of cotton wool, and an adhesive plaster so sticky that a large proportion of the adhesive compound adhered to the uncoated side of the fabric when the roll was opened out. The report includes the statement that, while the scheme of testing under the National Health Insurance Act has been officially suspended owing to the war, Insurance Committees are still at liberty to submit dressings and appliances for examination and are doing so in some instances.

COMING EVENTS

Sunday, March 17

Liverpool Branch, Catholic Pharmaceutical Guild, 152 Brownlow Hill, at 3.30 p.m. Miss K. M. Doran, M.Sc., on "Vivisection."

Tuesday, March 19

Guild of Public Pharmacists, 17 Bloomsbury Square, London, W.C.1, at 7.30 p.m. Annual meeting.

TRADE-MARK APPLICATIONS

The figures in parentheses refer to the classes in which the marks are grouped. A list of classes and particulars as to registration are given in "The Chemist and Druggist Diary and Year-Book," 1940, p. 275.

(From "The Trade Marks Journal," February 28, 1940)

SCHEDULE IV

"BROMANIN"; for medicinal and pharmaceutical preparations (5). By Boots Pure Drug Co., Ltd., 37 Station Street, Nottingham. 609,981.

"UMP"; for collapsible metal tubes and containers (6). By Universal Metal Products, Ltd., Langley Road, Pendleton, Salford, 6. 609,527 (Associated).

APPLICATION AMENDMENT

According to "The Trade Marks Journal" of February 28, 1940, the specification 607,049 by Midgley & Parkinson, Ltd., Warren Works, Swinnow Lane, Pudsey, Leeds, has been amended to "medicinal and pharmaceutical preparations containing yeast, veterinary and sanitary preparations and substances; infants' and invalids' food."

MEDICAL ABSTRACTS

Burns in Children.—The combined use of gentian violet, tannic acid and silver nitrate is adopted in the treatment of burns and scalds in children according to Dennison, who gives an account of his technique in the "Lancet," November 25, 1939, p. 1107. Theatre treatment of the burn or scald is carried out as for a major surgical operation except that the temperature of the theatre is rather above the normal level (about 80° F.). The anaesthetic of choice is gas-and-oxygen, with often a small percentage of ether. Only limited areas are dealt with at a time, for there is a rapid fall in body temperature if the child is entirely uncovered. With gauze moistened with warm saline all detached and blistered epidermis is removed, and the underlying surfaces are gently but rapidly cleansed. Soap and ether are used for cleansing only when the area is grossly contaminated or has been treated with an oily preparation before admission. A 1 per cent. aqueous solution of gentian violet is then painted over the raw surface. Apart from its antiseptic and coagulating action, this solution clearly demarcates the raw area. The surface is dried by a current of hot air from an electric hair-drier. Gauze soaked in a freshly made 5 per cent. solution of tannic acid is now applied, and while still moist the area is covered with a 10 per cent. solution of silver nitrate in the same manner. Immediate coagulation takes place. The area is again dried by hot air, and a further application of a 1 per cent. solution of gentian violet is made. On returning to the burns ward, the child is placed under an electric cage, and excessive movements are restricted by splints or bandages. A sedative (usually heroin) is given. No covering is placed over the coagulum. Desoxycorticosterone acetate has proved very valuable in the treatment of toxæmia, and the author advocates its use in all cases which develop this complication of burns. In the last five years the treatment has reduced the case-mortality from about 19 per cent. to about 7 per cent. and the incidences of toxæmia and of sepsis from about 33 to about 15 per cent. and 6 per cent. respectively.

New Oestrogenic Compound.—The clinical applications of triphenylchloroethylene have been investigated by Macpherson and Robertson ("Lancet," December 30, 1939, p. 1362). Triphenylchloroethylene is a synthetic substance which simulates the action of oestrogenic hormones. In trials it was administered in the form of oral tablets of 200 mgm., in ampoules containing 250 mgm. in 5 c.c. of sesame oil for injection and in cacao butter vaginal suppositories containing 100 mgm. Among the cases treated were four of amenorrhœa, sixteen in which menopausal symptoms were troublesome, eight with atrophic vulvitis and twelve in which it was desirable to inhibit lactation. Observation of the cases shows that the compound causes the same effects as the naturally occurring oestrogens, namely, uterine growth, proliferation of the endometrium, withdrawal bleeding, transition of menopausal to oestrous vaginal smear, relief of menopausal symptoms and the inhibition of lactation. On account of the low threshold activity its action is not sudden or dramatic. It is stated that it can be given over a long period in large doses without any definite toxic effects, adequate dosage being therefore easy to maintain and giving remarkable certainty of action. When given orally the duration of its action closely approximates to that of stilboestrol. By parenteral injection, however, the duration is prolonged; after 500 mgm. by the technique described, effective action persists for from six to nine weeks. Thus a small dosage is sufficient to maintain a continuous high level of oestrogenic activity.

EMPIRE ESSENTIAL OIL DEVELOPMENTS

THE following extracts of reports on investigations of Empire essential oils, at present mostly produced on an experimental scale, are taken from the annual report for 1939 of the Imperial Institute, South Kensington, London, S.W.7.

Palmarosa from Seychelles.—Three samples of palmarosa oil were submitted for examination by the Department of Agriculture. They were distilled from (a) fresh material, and (b) material after different periods of drying, and were all found to contain good percentages of total geraniol and to be generally of similar quality; the sample which had been distilled without delay from fresh material being slightly superior to the others. It thus appeared that the method employed for the preparation of that sample could be recommended.

Turtle from Ceylon.—The Commissioner for the Development of Agricultural Marketing in Ceylon submitted this oil as that of the turtle *Dermochelys coriacea*. It had a strong fishy odour, and was submitted to deodorising trials and also to decolorising and perfuming tests in order to devise a means of making it marketable. As a result of these trials recommendations were made in the Imperial Institute report as to methods which might be adopted in Ceylon with a view to finding a local market for the product. Observations were also furnished on the types of turtle oil employed in cosmetics and the feasibility of shipping the Ceylon oil in question to the United Kingdom.

Eucalyptus from Southern Rhodesia.—This oil of *Eucalyptus citriodora* was submitted by the Department of Agriculture in order to ascertain whether its commercial value was sufficient to warrant the planting of the trees mainly for this purpose. It was found to have constants agreeing with those previously recorded for *E. citriodora* oil, and it appeared probable that, if offered in small lots, the product could be disposed of in the United Kingdom at a price comparable with that of the Australian oil, which was currently realising 4s. to 4s. 6d. per lb. for perfumery and medicinal purposes. This outlet for *E. citriodora* is, however,

limited, and if large quantities were available it would be necessary to offer them as a source of citronellal, in competition with Java citronella oil, at about 1s. 10½d. per lb.

Geranium from Southern Rhodesia.—This oil has been distilled from plants stated to be *Pelargonium graveolens*, grown at the Salisbury Experiment Station, and was submitted by the Department of Agriculture in order to ascertain its quality and commercial value. It was found to have constants closely resembling those of a sample of *P. graveolens* oil from Southern Rhodesia previously examined at the Imperial Institute, but to be somewhat richer in geraniol. It was of good quality, and represented oil which should be readily saleable in the United Kingdom at a price somewhat below that of Algerian geranium oil, which was currently quoted in London at 10s. 4½d. per lb., c.i.f.

Geranium from St. Helena.—Five samples of geranium oil obtained from different varieties of pelargonium plants, and one sample of lemongrass oil, were submitted by the Agricultural and Forestry Department for examination. The samples of geranium oil were found to have constants closely resembling those of Bourbon and Algerian geranium oils, and to contain satisfactory amounts of "total geraniol." Three of the oils were, however, superior to the others, and were regarded by essential oil distillers as of promising commercial quality, and it was suggested in the Imperial Institute report that the propagation of the varieties of plant concerned might usefully be continued, in order to compare the yields of oil obtainable and to ascertain whether the quality of the oil could be maintained. The lemongrass oil was found to have constants closely resembling those of West Indian lemongrass oil obtained from *Cymbopogon citratus*, and to some extent approximating to those of Cochin lemongrass oil derived from *Cymbopogon flexuosus*. It had a satisfactory odour, and contained a good percentage of citral, and was considered of about equal market value to Cochin lemongrass oil, which was currently selling at about 3s. 3d. per lb., c.i.f. London.

FRENCH PERFUMERS AND THE WAR

FRENCH perfumers are more than satisfied that the recent economic conversations carried on between Great Britain and France have terminated in an agreement that will open the British market once again for French trade. With the disappearance of this restriction the industry takes a further step towards normal conditions, as they existed in pre-war days. It would be untrue to suggest that an industry such as perfumery manufacture has passed, or could pass, unscathed through so trying a period as the present. But, as M. Pasteur (Houbigant) explained: "If conditions, for the duration of the war, grow no worse than they are now, the perfumery industry will not complain."

Manufacturing Problems

A survey of this vital trade, for it is vital to France as the Government admits, must be classified under three headings: (1) accessories; (2) raw materials; and (3) the retail trade. Classification No. 1 includes bottles, packs, metal caps, etc. Manufacturers are finding no real difficulties in obtaining the necessary bottles, although at the beginning of the war the intensive traffic on the railways did hinder deliveries. Bottle manufacturers, too, who have troubles of their own, were not loath to pass them on. This meant that orders were then (and are still) held over for several weeks longer than they would have been before the war. That, however, is the only bottle difficulty worrying perfumers. Cardboard and paper for packages present a more difficult problem, the solution of which will not be easy to find. Paper is, of course, short in all countries, and the future is uncertain. On the other hand, the large houses hold sufficient stocks to be able to carry them over the present difficult period. M. Vaste (Bourgeois) explained that large buyers with outstanding contracts could look forward with equanimity into the immediate future, although the situation would certainly not improve with time. The real problem is metal—a product necessary for the national defence and therefore not easily procurable for the perfume industry. At the time of writing, metal capsules are still being used by the large firms, and no immediate change is contemplated. The future is uncertain, however. M.

Gallet (Roger and Gallet) stated: "If the shortage becomes really acute we shall have to find other materials, such as plastics, but such an unfortunate situation is not envisaged for the moment." On the whole, it is reasonably accurate to state that neither glass, cardboard nor metal shortages are serious at the moment. The large makers have stocks and contracts that will be filled, while no new models are being brought out to put a further strain on supplies.

Turning to the perfumes themselves, two major problems confront the industry, neither of which, at the moment, is sufficiently acute to cause anxiety. Fats are difficult to get for the manufacture of soap. M. Gallet explained that stocks are low, too, and that it has become a question of working from week to week. Import licences are necessary for fats, and manufacturers have had to buy wherever they can and at the same time wage a "battle royal" for the necessary licences. In spite of these difficulties, production has been maintained at near pre-war levels and it is hoped present difficulties will not increase. Production may then be maintained. Essential oils present another problem, not quite so difficult yet providing an issue of their own. When war broke out the Americans "panicked," fearing that they might be cut off from supplies. The market was invaded and crops were bought up hastily. Once again the large buyers triumphed, since each one has now a part of the crop reserved, but the smaller houses did not find the question quite so easy. The Government, too, encouraged American buyers, because exports mean foreign exchange. Licences are also necessary for importing essential oils such as rose otto from Bulgaria, and a tussle generally ensues with the Government over these. At the opening of hostilities the Government refused licences for the import of stearic acid, so necessary a compound in the manufacture of beauty products. Had this unreasonable refusal been upheld, the industry would have suffered severely, but finally licences were granted for much smaller quantities than are really needed. Some quantity has been bought in England. The Bourgeois organisation experienced further difficulty, at the beginning of the war, in exporting certain raw materials to England for use in the London factory.

Lemon oil, for example, was a prohibited export, but the Government has now raised its objections, and trade, if not back to normal, is not unsatisfactory.

The Retail Side

Retail trade brings forward the question of prices. Since the war a strict control has been set up by the Government to prevent unnecessary price increases. It will be readily understood that where Governments and prices are concerned there is generally friction, but whereas many industries have suffered from serious interference, the perfumery trade does not expect trouble from that direction. Prices until now have not been raised, though the question is being discussed. Under Government control the perfumery industry may raise prices without permission, but it will have to justify the increases when questioned by the authorities. In this the trade is fortunate, for in many other industries the authorities have stopped increases that have been considered, by manufacturers and retailers alike, to be perfectly justified. Because of this, few manufacturers have been willing to discuss the question of price increases. A decision has not, as yet, been reached by the Syndicate, though it is apparent even now that, whatever the decision may be, each firm will be left a perfectly free hand. It is possible to indicate, however, that increases may be expected of from 10 to 35 per cent. As the large perfumers will not raise their prices until circumstances force them to do so, the smaller manufacturers find themselves in an unenviable position, since their whole reason for existence is the lower-priced perfumes they produce. A luxury article enjoys a prestige value, and a firm with a great tradition will not experience a reduced turn-over if prices go up; the smaller manufacturer, on the other hand, at once feels the effect diminishing returns if he raises prices.

The effect is aggravated when raw material prices rise, as they are doing, and he is compelled to buy in the highest market.

This situation is probably the reason for the surprising lack of "war effort" among perfumers. There are no "war packs" in Paris, no "war windows." No special containers have been designed, nor have any of the large houses encouraged displays having a martial flavour. Some of the smaller retail shops have, however, offered "soldiers' packs" to the public, consisting of soap, shaving soap, eau de Cologne and one or two toilet articles, ready packed, offered at a price related to the quantity and quality of the articles.

Business is very fair and has largely moved into the provinces, where a great many Parisians have evacuated. There has been some fall in lotion sales, owing to the closing of hairdressing establishments and chemists' shops through mobilisation, but many are now reopening, either because some of the older men have been released from the army or because arrangements are being made to find men of non-military age to run the businesses. This question raises the final problem, that of labour. Few of the large firms have seriously felt the effects of war on labour. The actual manufacturing side employs mostly women, and only the executive and technical sides have been robbed of their directors and chemists. Many of these, however, are over military age, and in special circumstances even younger chemists have been released from military service because the Government realises the importance of the perfumery trade to France. The final position, therefore, cannot be said to be unsatisfactory. Exports to the United States are being maintained in spite of seriously increased freight charges, which have been partly countered by the increased value of the dollar against the franc. The opening of the British market is, of course, welcomed.

INTER-ALLIED COMMERCE IN PERFUMERY

FRIENDSHIP between Great Britain and France has become, since September 1939, a reality in many new directions. Considerable publicity has been given to decisions to buy in common, sell in common, and generally to increase inter-Allied trade—all of which help to strengthen the bonds between the two countries. Naturally, plans dealing with the successful conduct of the war come first, and non-essential trades are thus relegated to second place. In England, French perfumery is among industries classified as luxury trades, yet it may be said that most of the necessities of a highly civilised country are luxuries from the standpoint of a person living in a less advanced state of civilisation. So long as men are permitted to buy their beer and cigarettes, a good case can be put up for the argument that women (who, after all, are working and serving in the war) should reasonably be allowed to continue using perfumery and cosmetic products.

State of Industry in France

The actual position is, however, that French manufacturers have not been allowed to export their perfumes to England, though the position is improved by the recently concluded agreement, and find it increasingly difficult to do so to the British Colonies and Dominions. Import of perfumery into England was prohibited at the beginning of the war, and the ban proved a severe blow to the French manufacturers. Another factor in the situation in which the French perfumery industry finds itself is that when British rates of duty were raised some years ago, several French perfumers opened factories in England. In these factories were manufactured the whole of the perfumes (of the brands affected) required for the markets of Britain and the Empire. The spirit used in the manufacture of high-class perfumes is, however, highly taxed, and the rate of tax has recently been increased. The result of this has been that the manufacture of eau de Cologne with ethyl alcohol has become extremely costly, and it is understood that many perfumers in England have had to abandon the use of pure spirit in favour of cheaper spirits such as methyl alcohol. The whole of the perfumery trade has suffered in consequence, while the duty on pure alcohol used in perfumery no longer brings in an appreciable revenue to the Exchequer. Further, certain types of bottles formerly made in Bohemia are now made in France. It might be thought that this would provide French bottle manufacturers with a new market in this country, since there is virtually no manufacture of bottles of similar type in England, but here again import into England has been

restricted, together with the import of boxes for face-powder packings. There are at present good stocks of the raw materials for these containers in France, while products from certain sources are imported into that country under licence. The chief manufacturing difficulty at present is the dislocation caused by the general mobilisation, which has taken men of all ages from their normal occupations, so that they are now serving the armed Forces, or as chemists or civilians in war factories. Against this it may be remarked that the women of France have done men's work in previous emergencies and are, in fact, already doing their share again, while transport is certainly easier today than it was during the period of mobilisation. Raw material prices have increased about 20 per cent., and those of finished products, on an average, about 15 per cent., though the increase is less for high-class products. A problem the manufacturers of beauty creams, etc., have to face is the difficulty of obtaining beef tallow. There are now three "beefless" days in France every week for civilians, while cattle sent for Army feeding have usually lost fat before being killed. Moreover Army slaughterers are not invariably skilled, and some part of the remaining fat is possibly wasted. Demand, however, has not declined but increased. A great deal of tallow is required for waterproofing *godasses* (the French soldier's boots), and larger quantities are needed for candles and other articles for the Army. Supplies are certainly being bought in Australia, but tallow from this source contains a proportion of mutton fat, which makes it unsuitable as a component for a number of products. It is possible, therefore, that production of certain cosmetic products may be less than usual.

Future Prospects

Excluding French perfumery manufactured in England, France sold 21,000,000 francs' worth of perfumery to England in 1938, and, by the time French perfumes are once more on sale in this country, there will be a great many more British goods on sale in France. Many French people have long had a weakness for English goods, and have continued to buy them when, owing to rate of exchange, Customs, and taxes, the prices seemed most extravagant to English visitors abroad. These purchasers will be augmented by others who have come to know this country's products as a result of contact with British subjects in France for war purposes. French perfumery manufacturers, who are making great efforts to maintain their exports, would equally like to have Great Britain and the British Empire numbered among the markets fully open to them—H.T. (7/2).

KEEPING UP PERFUME SALES

THE hitherto uneven tempo of the war tends to give rise to an unsettled feeling among customers that may adversely affect the luxury trades. An occasional brilliant achievement on one side, or a tragic disaster on the other, is followed by uneventful weeks of apparent inactivity. Everyone expects drastic happenings sometime, but until they do occur, and even after, every attempt should be made to run business as usual, and to stimulate sales whenever possible. Perfume is essentially a luxury trade, but the ladies may be reminded that it is for them to keep the "home front" as bright and cheery as possible. However, when minds are filled with doubts of the future, special efforts are required to keep perfumery sales up to normal.

Showcards

The display illustrated on this page stresses two major themes: "BRIGHTEN THE HOME FRONT" and "PERSONAL FRESHNESS." There is no doubt that the latter theme has been the subject of one of the most successful advertising campaigns of recent years. Careful study of perfumery advertisements reveals that they all stress, as delicately as possible, personal freshness. This analysis is made use of in assembling the display. The two themes are put forward in two handwritten showcards. The first carries the actual words "BRIGHTEN THE HOME FRONT"; the second is of a more conversational type, worded as follows:—"The right perfume assists and emphasises personal freshness. Let beauty be a duty and keep the 'home front' fresh, bright and cheerful." The principal card is placed in a prominent position at the back of the window, while the "conversation piece" is placed in the centre of the window and towards the front (for easy reading). The display should naturally have a fresh, bright appearance and, with this aim in view, the background and base of the display were carried out in pale blue fabric, the stocks of perfumes being built attractively before and upon them. Readers will be familiar with rumours in the trade that there is shortly to be a general increase in the prices of perfumes. There are signs that suggest this particular rumour may be true. Already there have been price increases in some quarters. Foreign bottles are scarce or unobtainable, and British-made bottles are more expensive than before the war. Prices of volatile oils and perfume bases are increasing, and showcards have recently been issued that are not marked with the prices of the products. It would therefore seem a wise policy to buy extra stocks of perfumes now, while the manufacturers are in a position to supply



speedily, and before the changes foreshadowed are put into operation. Obviously there is not the slightest risk of retailers being left with "dead" stock.

At the present time most chemists are inclined to keep in the background their stocks of French perfumes, soaps and cosmetics. There is prudence in this policy so long as it is based on the prohibition of imports of French perfumery manufactures into this country. There are usually regular customers for special brands whom every chemist will wish to satisfy before letting scarce stocks go to chance customers. However, as will be seen from articles on other pages in this issue, the ban has been lifted. Not only so but French and British manufacturers and exporters in many industries are getting together both officially and unofficially to promote war-time trade between the two countries. The effect of this will no doubt take some weeks to be experienced by retail distributors, but eventually there should be a resumption of something like normal supplies and distribution. In the circumstances, while chief prominence will naturally be given to British perfumery products in the display, chemists who have any appreciable stock of French products put by may safely include a few of the more popular in the window, thus converting it into what is virtually an "Entente cordiale" display. In suitable circumstances a most attractive setting could be made in the colours red, white and blue.—*Spencer Wells* (12/3).

PHARMACEUTICAL PRESERVATIVES

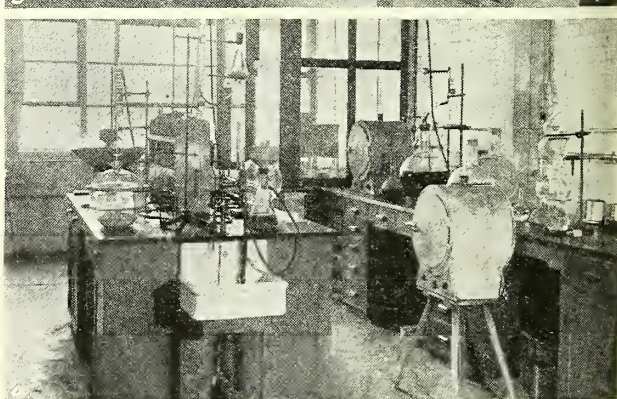
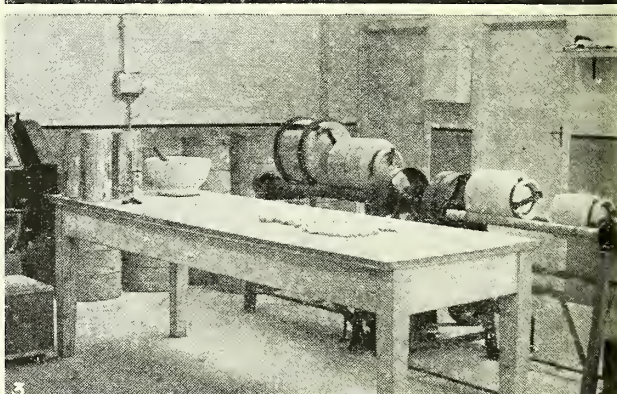
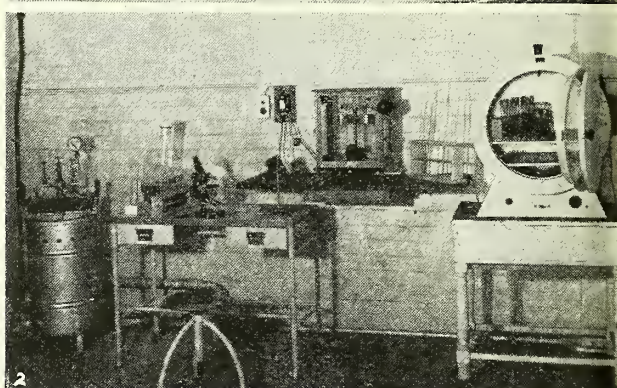
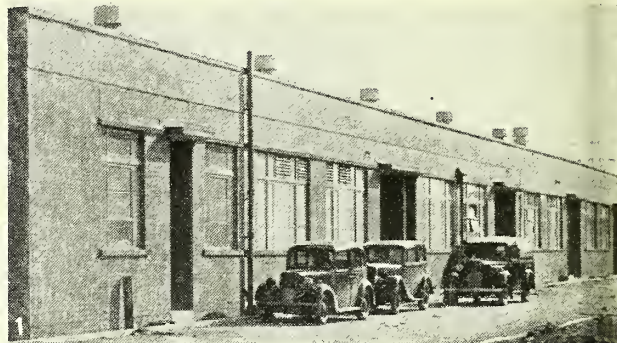
THE manufacture of modern pharmaceutical preservatives has in the past been carried out to a large extent in Germany, and until the outbreak of war products from that source were steadily gaining popularity in the United Kingdom. Production of these compounds has now been commenced on a large scale in this country by Nipa Laboratories, Ltd., and the following is an account of the use of these products in pharmaceutical practice. The Cardiff works of this company are now adding several new products to their antiseptics, antioxidants and preservatives, which include Nipagin and Nipasol. One of these is Nipa Sterilisor I, which possesses the property of being able to kill very resistant spores by means of combining various higher esters in an average concentration of 0.12 per cent. Another new product is an antioxidant for pharmaceutical and cosmetic purposes, Nipa 49, which is also a higher ester of another organic acid. This product is of value in preventing oils, fats, animal and vegetable, fatty and oily ointments, emulsions, creams and the like from becoming rancid. In addition to a modern factory, the company has chemical and bacteriological laboratories where they are ready to examine, free of charge, materials submitted by customers with a view to recommending preservatives, antiseptics, or antioxidants suitable for the different pharmaceutical, cosmetic, or technical purposes. The accompanying illustrations show part of the exterior and interior of the company's factory on the Treforest Trading Estate, Cardiff.

In considering the problem of sterilisation and preservation of pharmaceutical preparations two important factors must be borne in mind. Firstly, direct injurious effects on the patient by bacteria must be avoided; secondly, it is necessary to avoid loss by deterioration of a substance caused by bacterial growth. The correct preparation of any medicinal product according to a formula depends not only on the use of accurate doses of substances, but the final preparation must also possess sufficient durability. Bacterial decomposition may reduce durability, with the consequent formation of poisonous assimilation products, the harmful action of dead organisms following injections and the chemical reactions caused by bacteria. For instance, it has been shown that in ampoules containing scopolamine and opium, which, owing to insufficient sterilisation, was attacked by fungi, the alkaloids were completely destroyed. Similarly in a solution of potassium chlorate stored for a year, the chlorate was reduced to chloride by the activity of penicillium; furthermore, in pills containing arsenious acid there occurred a reduction of the substance to diethyl arsine by *Aspergillus glaucus*. The following examples may show how far aqueous solutions of chemical substances may be attacked by micro-organisms. Bacteria, yeasts and mould fungi have been found in solutions of alum, boric acid, arsenic, potassium chlorate, iron albuminate; bacteria and moulds have also been found in solutions of atropine, codein phosphate, morphine, tartaric acid, zinc sulphate; moulds have been detected in solutions of borax, sodium bromide, cocaine, caffeine, sodium salicylate.

A considerable number of chemical substances can be used in pharmaceutical practice to effect sterilisation, but many are unsuitable for medicinal products because of their poisonous effect. Experiments have shown that the addition of small quantities of esters of *p*. hydroxybenzoic acid, especially the methyl-ethyl and propyl- and benzyl-esters hinders the development of micro-organisms in the preparation. These esters have been found to be superior to other substances used as preservatives and are less harmful to human beings. The esters, or combinations of different esters, not only keep a sterilised solution sterile, but also kill the germs living in unsterilised solutions. The esters referred to are neutral, odourless and tasteless compounds, and are not changed by very dilute acids or alkalis.

The following table shows a comparison of the efficiency of the different esters with that of phenol—

Compound	Fermentation inhibiting	Growth inhibiting	Germicidal action
Phenol	1	1	1
Methyl ester	3.7	3	2.6
Ethyl ester	5.3	8	7.1
Propyl ester	25	17	15
Benzyl ester	69	109	63



- (1) Exterior view of part of factory
- (2) Part of the bacteriological laboratory
- (3) A corner of the machinery room
- (4) View of general laboratory

From the table it will be seen that the activity increases in proportion to the alkyl group. As the esters are soluble in water to limited extent, sometimes the necessary concentration for a reliable bactericidal action cannot be obtained with a single compound, and in such cases a combination of different esters is advisable, such as 0.07 per cent. of the methyl-ethyl ester plus 0.03 per cent. of the propyl ester. Such a combination is more readily soluble and its action is even stronger than the sum of its compounds.

Alternatives to these esters are their sodium compounds which are easily soluble in water and, unlike the sodium salts of other preservatives, do not depend for their bactericidal and preserving action on the reaction of the material. Furthermore, in the absence of albumen also, they retain their full activity against micro-organisms.

Tests on human beings and animals fed and injected with these substances show that the esters are less toxic than many preservatives used hitherto when used *per os* as well as in collyria and also for subcutaneous, intramuscular and intravenous injections. When solutions, which were specially prepared and stored non-sterile, were injected it could not be shown that any harm was done to the organism nor to the health in general, nor was there any irritation at the place of injection.

The following table gives an indication of the strength of compound required for the preservation of a number of preparations met with in pharmaceutical practice.

Preparation	Methyl-ethyl ester Per cent.	Propyl ester Per cent.	Sodium propyl ester Per cent.
Agar emulsions	0.04-0.08	—	—
Almond lotions	0.15	+	0.05
Carrageen (Irish moss) ..	0.1	-0.2 or	0.15
Cod liver oil emulsions ..	0.1	+	—
Creams:			
Fat-free	0.05-0.15	—	—
5-10% fats	—	0.12	—
10-20% fats	—	0.15	—
Over 20% fats	—	0.02	-0.25
Creams with lecithin, cholesterol and hormones	0.25	+	0.05
Drug infusions	0.15	or	0.2
Emulsions	0.1	+	0.05
Eye drops or washes ..	0.06	+	0.03
Gelatin solutions	0.1	—	—
Glycerin jelly or solution ..	0.15	—	—
Gums, solutions	0.13	—	—
Hair preparations	0.1	-0.2	—
Injection solutions	0.052	+	0.028
Lipsticks	—	0.2	—
Mouth washes, antiseptic ..	0.26	+	0.14
Mucilages	0.1	-0.2	—
Oil solutions	0.15	+	0.15
Ointments, fatty	0.2	+	0.1
Starch solutions	0.1	+	0.05
Suppositories	0.15-0.5	+	0.1
Syrups, cough	0.06-0.15	—	—
Tooth pastes	0.1	-0.2	+

U.S.P. STANDARDS FOR CATGUT

NEW standards for surgical catgut become official in the United States of America on July 1, 1940. From that date any suture marketed for surgical use must, under the Federal Food, Drug and Cosmetic Act, 1938, meet the requirements of the United States Pharmacopoeia, and any manufacturer distributing, for surgical use, catgut which differs from the Pharmacopoeial requirements must label his product to indicate that it is not of U.S.P. quality, and state every respect in which it differs from the Pharmacopoeial product. A definition of surgical catgut, together with its physical properties, tests for purity, procedure for labelling and storage, etc., is given in second supplement to the U.S.P. eleventh decennial revision. The following are details of the new standards.

Sterility.—Anything employed as a suturing material in animal bodies must be sterile beyond any question of doubt. Although the processes employed in the fabrication of the raw catgut remove all foreign material and most bacteria, some of the latter still persist. After processing, sutures are accordingly sterilised. The choice of technique is left to the discretion of the manufacturer, but, to avoid the possibility of contamination after proper sterilisation, the U.S.P. requires that each strand shall be preserved in an individual hermetically-sealed glass container in which sterilisation has been effected, and presents a rigid laboratory technique to be used for determining the sterility of the marketable samples. It also requires that a lot number be placed on all packages of surgical catgut, to serve to identify the method and time of sterilisation, and the composition of any tubing fluid used.

Tensile Strength.—The various sizes of catgut must meet a minimum tensile strength as determined on the average of the strength of five strands from any one lot.

Length and Diameter.—Measurements of length are to be within 10 per cent. of the length stated on the label. The diameter must be even and accurate of gauge. The U.S.P. presents a table giving a minimum and maximum diameter for each of the different sizes of catgut, details the technique for determining the diameter of each strand, and requires that at least two of three measurements, taken at points located approximately at each quarter of the length of the suture, shall fall within the diameter limits specified in the table.

Absorption.—The rate of absorption is influenced by the kind of catgut used, by the physical condition of each person, and to the degree that the condition of the patients' tissues varies from normal. Plain catgut is absorbed usually within three days. By tanning or chemical treatment (usually chromicising) absorption is delayed, and chromicised sutures are com-

monly labelled "chromic sutures, ten days" or "twenty days" or "forty days." The number of days indicated is supposed to denote the period of time the chromic catgut will hold together the sutured tissues. In reality, the days indicate the approximate period of time the catgut is found to resist complete digestion by tissue enzymes when embedded in normal striated living muscle of animals. Necessarily this does not bear an accurate relation to the absorption time in the human body. Surgeons report that the time indicated is frequently misleading, and the Pharmacopoeia has abandoned the practice of noting a time period or number of days. If the catgut has been tanned or otherwise treated to resist digestion, a note on the label of "mild," "medium" or "prolonged" treatment is to be made. This indicates approximately the kind or extent of chromicising or other treatment. In the present U.S.P. text an absorption test is not presented. This is regretted, but it is emphasised that, in the U.S.P., catgut is standardised as far as is practicable at present. No one has yet devised an absorbability test which is acceptable generally as a standard technique. The surgeon requires assurance that the catgut he is using will not be absorbed by the body before the wound has healed; too rapid absorption has serious and often fatal consequences for the patient. The manufacturer can control this to a marked degree, and if the structural make-up of the gut, method of treatment and looseness of twisted strands are noted, incomplete or delayed absorption becomes of less importance. Recent investigations have indicated that, in sealed ampoules at low temperatures, trypsin may be sufficiently stable to render it possible to develop a digestion test, using a standard U.S.P. reference trypsin preparation as the digestive agent. Arrangements are being made to supply this standard trypsin. With this factor properly controlled, and after further intensive investigation, a standard test of absorbability is expected to be available in the near future. The synthetic digestion test, which simulates the action of body enzymes, can be duplicated under identical conditions at all times; rate of absorption and evenness of absorption along the entire length of a given strand can be noted. But until the test is properly controlled, and before such technique has proved to be a measurable and reliable standard, its admittance into the U.S.P. will not be considered.

INVALIDS' RATIONS UNCHANGED.—In reply to a question by Mr. Graham White, on March 6, the Minister of Food (Mr. W. S. Morrison) said that any increase in the butter ration would be available to diabetics, but that for reasons previously stated, he would not be justified in authorising the issue to invalids of any allowance of butter in addition to the prescribed ration.

TRADE NOTES

SANOID ZINC AND STARCH POWDER.—Cuxson, Gerrard & Co., Ltd., Oldbury, publish the revised wholesale and retail prices of Sanoid zinc and starch toilet powder in their advertisement in this issue.

VINOLIA Co., LTD., Bebington, Cheshire, have adopted substitute containers for Vinolia shaving sticks and solidified



brilliantine owing to the fact that aluminium is no longer available for commercial purposes. The former is supplied in a cream and blue metal container, but in the original carton, which now bears an emergency slip notifying the alteration. The brilliantine is packed in an embossed tin plate container. Both products are shown in the illustration above.

PRICE INCREASE.—Glaxo Laboratories, Ltd., Greenford, Middlesex, announce that from March 11 the prices of complete and spare Glaxo feeders have been increased. The prices of teats and valves remain unchanged.

CHEMISTS' CONFECTIONERY IN TINS.—Meggeson & Co., Ltd., Llewellyn Street, London, S.E.16, announce that there is no shortage of Meggeson pastilles, tablets or lozenges, which they can supply packed in tins or cartons; while slight delays that may have occurred in the past, due to transport difficulties, have now been overcome.

SHOWCARDS FOR SPONGES.—Cresswell Brothers, Red Lion Square, London, W.C.1, have issued two striking cut-out showcards for calling attention to sponges. One contains a message, "Put a sponge in his or her kit bag"; the other reminds a customer that a sponge is "a necessity and a joy." Copies of the showcards may be obtained on request.

SANOGYL DENTIFRICE.—Sealand Trading, Ltd., Regent House, Kingsway, London, W.C.2, inform us that their Sanogyl dentifrice is affected by the recent amendment to the Poisons Rules exempting from the First Schedule dentifrices containing 0.5 per cent. of acetarsol. From April 1, therefore, Sanogyl may be supplied without prescription, but on account of its acetarsol content it remains in Part I of the Poisons List. The sale is thus confined to chemists.

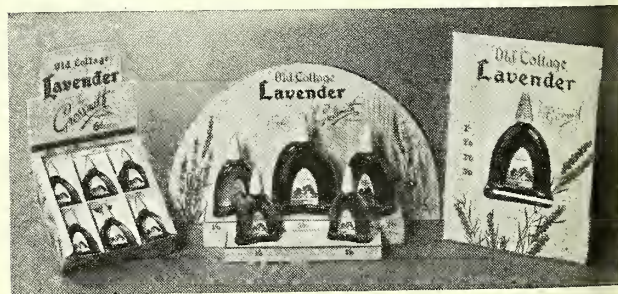
RED HEART DOG FOOD.—John Morrell & Co., Ltd., 57 Victoria Street, Liverpool, 1, are calling attention in the Press to the advantages of their Red Heart dog food, which contains a balanced diet comprising beef, cereals, vegetables, cod liver oil and yeast in correct proportion to maintain the health of all breeds. Red Heart is available in three flavours and is likely to be in increased demand with the advent of meat rationing. Particulars as to wholesale and retail prices are given in the company's advertisement.

BRITISH PERFUMERY COMPOUNDS.—W. J. Bush & Co., Ltd., Ash Grove, Hackney, London, E.8., have recently introduced a series of perfume compounds notable for their true and refreshing odours. The following are examples of the series. Surprise P.2070, for the manufacture of spirit perfumes and powders. Lilac P.2055, Sweet Pea P.2059 and Jasmin P.2052, for all descriptions of toilet preparations, soaps, etc. There is, it is claimed, a wide application for these products, as they give the users a guarantee of uniform quality at prices which show no increase on pre-war values. Contracts can be made for forward delivery at current prices, subject to the usual war emergency clause. Messrs. Bush will be pleased to forward trial samples and prices on application, and state that manufacturers will find it cheaper to use compounds than make up their own blends, which involves the purchase of a number of essential oils at increasing prices.

LEGALITE MERCURY TORCH SWITCH.—L. G. Hawkins, Ltd, 30-35 Drury Lane, London, W.C.2, are placing on the market under the name of Legalite, a mercury switch which will fit any standard size torch and its use makes it impossible for any torch user to break the lighting restrictions. This new device automatically cuts off the light from the torch when it is held at any angle over the horizontal. Legalites are to be the subject of a publicity campaign in the lay Press. Chemists can obtain sales promotion matter from the above address.

EASTER HOLIDAYS.—The following wholesale houses have informed us that their premises will be closed from Thursday evening, March 21, until Tuesday morning, March 26: **ANGLO-FRENCH DRUG Co., LTD.** (urgent supplies from John Bell & Croyden, 50 Wigmore Street, London, W.1); **BAYER PRODUCTS LTD.** (urgent supplies from John Bell & Croyden or from R. Woolby Brooke, 38 Gloucester Road, S.W.7); **THE BRITISH DRUG HOUSES, LTD.**; **BURGOYNE BURBIDGES & Co., LTD.**; **BURROUGHS WELLCOME & Co.**; **DAKIN BROS., LTD.**; **ENDO CRINES-SPICER, LTD.**; **ROBERT FERBER, LTD.**; **GLAXO LABORATORIES, LTD.** (urgent orders can be dealt with on March 23); **HARWOODS LABORATORIES, LTD.**; **C. J. HEWLETT & SON, LTD.** (open Saturday, March 23); **HOMBURG PHARMA, LTD.** (urgent supplies from John Bell & Croyden); **KAYLENE, LTD.**; **S. MAW, SON & SONS, LTD.** (for general business); **MEGGESON & Co., LTD.** (from 1 p.m., March 21); **H. R. NAPP LTD.** (urgent supplies from John Bell & Croyden, or R. Woolby Brooke); **PARKE, DAVIS & Co.** (urgent supplies daily 10 a.m. to noon, and 6 p.m. to 7 p.m., except Sunday evening); **PHARMACEUTICAL SPECIALITIES (MAY & BAKER), LTD.** (urgent orders from Curtis & Co., 79 Baker Street, London, W.1, and W. Martindale, 50 Wigmore Street, W.1); **WILLIAM RANSOM & SON LTD.**; **R. J. REUTER Co. LTD.**; **ROCHE PRODUCTS, LTD.** (urgent orders day and night from John Bell & Croyden, or R. Woolby Brooke); **SCHERING, LTD.** (urgent orders can be dealt with between 10 a.m. and noon on March 23; at other times supplies can be obtained from John Bell & Croyden, or W. Martindale); **SHARP & DOHME, LTD.** (open Saturday, March 23, from 9 a.m. to noon; urgent supplies from John Bell & Croyden or R. Woolby Brooke); **JAMES WOOLLEY SONS & Co., LTD.** (open Saturday, March 23); **WRIGHT, LAYMAN & UMNEY, LTD.**; **ALLEN & HANBURY'S, LTD.** (urgent orders to Vere Street).

OLD COTTAGE LAVENDER.—J. Grossmith & Son, Ltd., Newgate Street, London, E.C., have introduced this season a new



series of Old Cottage Lavender. The distinctive packs and display material are shown in the accompanying illustration. The green bottles with cream caps stand out in a striking manner against the white background of the stand, the whole presenting a pleasing note of freshness. The green bottles have the added advantage of protecting the perfume, which maintains the Grossmith standard, from strong light during summer months. There are six sizes, with prices ranging from 6d. to 5s. Prompt delivery can be made from stock.

Proprietary Articles Trade Association

Addition to Protected List.—*A. Wander, Ltd.*, Ovaltine tablets, 4d., 3s. 2d. doz.; 1s. 3d., 12s. doz.

Alteration.—*Sparklets, Ltd.*, C bulbs, boxes of twelve, 4s. 37s. 6d. doz.; boxes of six, 2s. 1½d., 19s. 9d. doz., less 2½ per cent. monthly account.

BIRTHS

Notices for insertion in this column must be properly authenticated

BARRIE.—At 9 Grosvenor Street, Edinburgh, on February 24, the wife of D. Barrie, M.P.S., Corstorphine, of a son.

MARRIAGES

HAYES—OLDFIELD.—At the Congregational Church, Allerton, Bradford, on February 24, by the Rev. Leslie Hall, Walter Hayes, M.P.S. (representative staff of James Woolley, Sons & Co., Ltd., Manchester) to Elsie Oldfield.

HUDSON—DAVIS.—On March 9, Walter Hudson, M.P.S., Skegness, to Gwendoline Davis.

TAYLOR—EADIE.—At St. Columba's Church, Pont Street, London, S.W., on March 6, Charles Allison Taylor to Isabella Cassells Marr Eadie, M.P.S. (formerly on the staff of Parke, Davis & Co.).

DEATHS

CALLAM.—Recently, Mr. William Eggleton Callam, M.P.S., 194 Crystal Palace Road, London, S.E.22, aged seventy-three.

COOPER.—Recently, Mr. Thomas Cooper, chemist and druggist, Mount Pleasant, Upton, Macclesfield, aged ninety-three. Mr. Cooper passed the Modified examination of the Pharmaceutical Society in 1870.

CRABTREE.—On March 8, Mr. Edward Crabtree, M.P.S., Todmorden, aged fifty-six. Mr. Crabtree had been in business locally for twenty-five years, and was past-president and former secretary of Todmorden Chamber of Trade. He was also local representative on the West Riding County Council.

CUNNINGHAM.—At Balmoral Drive, Cambuslang, on March 4, Mr. John James Cunningham, chemist and druggist, aged eighty.

FIELD.—Recently, Mr. George Rogers Field, M.P.S., 684 Chester Road, Erdington, Birmingham, aged sixty-five.

FREEMAN.—Recently, Mr. Henry Swift Freeman, M.P.S., 58 Sharoe Green Lane, Fulwood, Preston. Mr. Freeman passed the Minor examination in 1892.

GREENSILL.—Recently, Mr. Edward Merrick Greensill, M.P.S., Market Place, South Normanton, Derbyshire, aged ninety-six. Mr. Greensill was in business prior to the coming into force of the Pharmacy Act, 1868.

JONES.—Recently, Mr. Frank Jones, M.P.S., 63 New Bottle Street, Houghton-le-Spring, aged sixty-four.

KYLE.—At his residence, "Morna," College Avenue, Bangor, Co. Down, on March 4, Mr. Hugh Kyle, Ph.C. Mr. Kyle was apprenticed to Mr. T. B. Gorman, Bangor, and was for some years in business on his own account in Main Street. Keenly interested in music, Mr. Kyle was a member of the Bangor Harmonic Society and the Bangor Choral Society, acting as secretary of the latter organisation.

LESTER.—On March 6, Mr. William Henry Lester, M.P.S., 53 Hinckley Road, Nuneaton.

LOWE.—At his home in Stalybridge, on March 10, Mr. Arthur Lowe, aged forty-four. Mr. Lowe was for over twenty years a valued representative of Potter & Clarke, Ltd., and was attached to their Manchester branch.

MCGLASHAN.—Recently, Mr. Peter McGlashan, retired chemist and druggist, St. Andrew Street, Alyth. Mr. McGlashan passed the Minor examination in 1893.

MCINROY.—Recently, Mr. James McInroy, M.P.S., Newholme, Hester Road, Little Sutton, Cheshire, aged seventy-six.

OLDS.—At his home, "Moreton," Upper Oldfield Park, Bath, on March 10, Mr. Arthur Charles Olds, M.P.S. (A. C. Olds & Co., Ltd., chemists, Argyle Street), aged seventy-six. Mr. Olds had not enjoyed the best of health during the past year, but his death, due to heart failure, was unexpected. He became proprietor of the business in Argyle Street in 1891, and in 1908 took Mr. W. J. Purway, Ph.C., into partnership. In 1923, the business was converted into a limited company. In the earlier days, Mr. Olds also owned a chemist's business at Grosvenor, but subsequently disposed of this. As a young man he was a keen cyclist, and later he became a keen golfer, being a member of the Lansdown Club, and, after the last war, took an active part in

re-forming it. Mr. Olds was also a member of the City Club. He attended the Abbey and was a sidesman there. Some years ago he took a prominent part in Freemasonry. He was a member of the Royal Cumberland Lodge, the chair of which he occupied in 1913. He held provincial rank as Provincial Grand Organist. He leaves a widow and three daughters, one of whom, Mrs. T. J. Cornish, is the wife of the proprietor of the business of Mills & Mills, chemists, George Street, Bath.

ROBERTS.—On February 25, Mr. Herbert Roberts, Ph.C., 250 Shankill Road, Belfast, aged forty-three. Mr. Roberts was associated in business with his father, Mr. E. J. Roberts, Ph.C.

SAUNDERS.—Recently, Mr. Hugh Francis Saunders, M.P.S., East Barnet Road, New Barnet. Mr. Saunders passed the Minor examination in 1901.

SUTCLIFFE.—At Buxton, recently, Mr. Isaac Sutcliffe, chemist and druggist, aged eighty-three. Mr. Sutcliffe was formerly in business at Mossley and Ashton-under-Lyne.

THOMPSON.—At 101 Enfield Street, Belfast, on February 21, Mr. Andrew George Thompson, R.D. Mr. Thompson, who had been living in retirement for the past few years, was registered in 1892.

WEALL.—Recently, Mr. George Alexander Weall, chemist and druggist, Ridgeway Avenue, Rhyl. Mr. Weall passed the Minor examination in 1890.

WILLIAMS.—Recently, Mrs. Winifred Spurrell Williams, M.P.S. (née Davies), the wife of Mr. A. G. Williams, B.Sc., M.B., Ch.B., F.R.C.S., Shrewsbury. Mrs. Williams passed the Qualifying examination of the Pharmaceutical Society in 1930.

PERSONALITIES

Mr. F. G. JAMESON, B.Pharm., Ph.C., has been appointed manager of Matthews & Wilson, Ltd., Cole Street, London, S.E.1, in succession to Mr. G. F. Caley.

Mr. ALEXANDER ROBERTSON, M.P.S. (managing director, James Anderson (Chemist), Ltd., Commercial Street, Dundee, gave a talk on fishing to local Rotary Club on March 7.

MRS. S. TAYLOR, wife of Councillor S. Taylor (Thos. Tomlinson & Son, chemists' valuers, Manchester) has been appointed deputy chairman of the Marple and District Food Control Committee.

CAPTAIN J. C. TOWNLEY, who was in command of the "Queen Elizabeth" on her maiden voyage to New York, is the son of the late Mr. T. W. Townley, Ph.C., and brother of Mr. T. T. Townley, M.P.S., Keswick.

ANTOINE CHRIS, LTD.—Mr. Frederick E. Shoninger has been appointed managing director of the London company in place of Mr. E. Kershaw, who is on military service. Mr. Shoninger has had experience of the associated company's works in Grasse and is fully conversant with the production and application of essential oils and other raw materials of the perfumery and cosmetics industry. Mr. Kershaw will continue to be a director of the company.

RECENT WILLS

Mr. SAMUEL PERCY BILLINGTON, M.P.S., 43 Clough Road, Rotherham, Yorks, who died on November 8, 1939, left £8,641, with net personality £4,121.

Mr. WALTER GREGORY, M.P.S., Wellington, Somerset, who died on October 24, 1939, left property of the value of £19,738, with net personality £19,134.

Mr. THOMAS JONES, M.P.S., Gilgwyn, Oakhurst Road, Oswestry, Salop, retired chemist and druggist, who died on October 24, 1939, left £5,842, with net personality £2,008.

Mr. WALTER WHITE, M.P.S., sen., "The Shrubbery," 163 Tennyson Road, Luton, Beds, who died on October 5, 1939, left property of the gross value of £23,616, with net personality £9,242.

MISS MARGARET ELIZABETH BUCHANAN, M.P.S., 1 Grange View, Lymstone, Devon, the first woman to become a member of the Council of the Pharmaceutical Society, who died on January 1, left £2,099, with net personality £1,401 os. 5d. She left 10 guineas to the Benevolent Fund of the Pharmaceutical Society of Great Britain.



John Bell BRAND
COLD CURE CAPSULES
RETAIL 1/3 TRADE 9/- doz. boxes

JOHN BELL HILLS & LUCAS LTD
OXFORD WORKS, WORSLEY BRIDGE ROAD, S.E. 26

THE PERFECT CLOSURE FOR ALL TYPES OF CONTAINERS

AIRTIGHT **SUBA-SEAL** UNBREAKABLE

THE ANSWER TO THE STOPPER PROBLEM

WILLIAM FREEMAN & COMPANY LIMITED
GRAMS. SUBA-SEAL LEADS

"*Britannia House*"
Wellington St., Leeds. 1
TELEPHONE: 24746

NICOTINE INSECTICIDES
(PART 2 POISON)

Nicotine 95-98% ; Nicotine Sulphate 40%.
Nicotine Fumigants (Shreds, Compound, Rolls).
"Lyce-Deth" (A Super Poultry Perch Paint).
Nicotine Washes (Nico Soap, etc.).
Nicotine Dusts, 2%, 3% or 4% grades.

Apply for particulars to:
J. D. CAMPBELL NICOTINE MANUFACTURER
17 LUND STREET, MANCHESTER 16

Felsol (Regd) BRAND
POWDERS

for
Asthma

Continuous Propaganda conducted
with the Medical Profession.

P.A.T.A. terms upon request

BRITISH FELSOL COMPANY, LTD.
"WIGTON HOUSE"

206/212 ST. JOHN STREET, CLERKENWELL, LONDON, E.C.1

EXTRA
RECTIFIED **ALCOHOL**
FOR
PERFUMERY

Write for Prices
JAS. BURROUGH Ltd. 1 Cale Distillery,
LAMBETH, S.E.11

WOOTTON'S CHRONICLES OF PHARMACY. Price 12s. 6d.,
by post 13s.
PHARMACEUTICAL FORMULAS (P.F., Vol. 1). Price 15s.,
by post 15s. 6d.
PHARMACEUTICAL FORMULAS (P.F., Vol. II). Price 15s.,
by post 15s. 6d.

There's **BIG NEW PROFIT**
for YOU in

**GEORGE BELL'S
CAT POWDERS**

★ GENEROUS TERMS TO THE TRADE
Vigorous National Advertising Support
Write for full details TO-DAY to:
GEORGE BELL & SONS LTD.
Veterinary Chemists
Silverdale Works - LIVERPOOL, 13



L.T.S

THE ART OF DISPENSING

(NEW EDITION. 552 PAGES)

Re-written, completely revised, freshly
illustrated, enlarged and thoroughly up-
to-date in every detail.

This book—the recognised authority on the
subject—is an essential
part of the equipment
of every dispensary.
It simplifies the many
problems which so fre-
quently arise during
the day's work at the
dispensing counter.
Compiled by profes-
sional experts for the
use of the Craft—this
is a book which every
Pharmacist **must**
possess.



PRICE 10/6 11/- Post Free

You can order direct from your usual Wholesaler or
direct from the Publisher

THE
CHEMIST AND DRUGGIST

28 ESSEX STREET, STRAND, LONDON, W.C.2

THE CHEMIST AND DRUGGIST

VOL. CXXXII

March 16, 1940

NO. 3136

CONTENTS

	PAGE		PAGE
An Aire Pharmaceutical Industry	218	Keeping Up Perfume Sales ..	205
Births	209	Manchester Testing House ..	202
Coming Events	202	Marriages	209
Commercial Notes	225	Medical Abstracts	202
Company News	198	Miscellaneous Inquiries ..	226
Correspondence	226	News of the Week	195
Cystine Production	201	Perfumery Raw Materials ..	216
Deaths	209	Perfumes in Smallpox ..	213
Editorial Articles:—		Personalities	209
A Welcome Order	212	Pharmaceutical Preservatives	206
Anglo-French Industrial Agreement	212	Pharmaceutical Society of Great Britain:—	
Boom in Perfumery and Cosmetics	211	Evening Meeting	199
Council Election Questions	211	Recent Research	215
Income Tax—A Suggestion	212	Recent Wills	209
Nothing Over 10½d.	212	"The Art of Dispensing" and a Best Seller	200
Sterile Kisses	212	Topical Reflections	198
Empire Essential Oil Developments	203	Trade Marks	202
French Perfumers and the War	203	Trade Notes	208
Half a Century Ago	200	Trade Report	221
Indian Chemical Imports ..	220	Travancore Lemongrass Industry	220
Inter-Allied Commerce in Perfumery	204	U.S.P. Standards for Catgut	207
		Visit to Saville's Factory ..	215
		World Mineral Industries ..	224

The Boom in Perfumery and Cosmetics

TWENTY years ago perfumery, cosmetics and most toilet preparations were the occasional luxuries of the few. Today, their general use is world wide and they have become everyday necessities. In this country, as in most others, "make-up," popular priced perfumes and all the other aids to beauty are now essential to the normal life of the modern woman. Their psychological effect is much the same, at a fraction of the cost, as a new dress or the latest model in hats. The products of the art of the perfumer and the manufacturers of face powders, creams, rouges, lotions, etc., certainly cannot be classed as war-time luxuries, and to suggest restricting their use on grounds of economy would, we believe, be a step in the wrong direction. Rather, we suggest, their use should be encouraged for the purpose of cheerfulness in these rather drab and trying times. For the period of the war some hundreds of thousands of women will be engaged on munitions, armaments and other war work. The retailer should realise that most of these women, as housewives, have in the past been only casual users of cosmetics; now that they are out all day in factories and workshops and will have more money at their disposal, their purchases will increase substantially. Bright and cheerful window displays of these goods, of which there is no lack of variety, in attractive packings and at popular prices, would be likely to result in increased business.

British production, both of raw materials and the finished products of the perfumery and cosmetics industry has made great strides in the past few years, and it can fairly be claimed that in quality, price, variety and packing, they are at least up to world standard. While, of course, we are still reliant on outside sources for many of the natural essential oils, we are now approaching the point of becoming self-supporting in the production of synthetic aromatics and similar materials. The manufacture of

compounds ready for use by the makers of perfumes, cosmetics and toilet preparations is now an important part of the home industry. The quality of these economical and standardised products is distinguished by the true and refreshing odours they impart. Consumers are likely to take an increasing interest in these "made-up" bases, as an alternative to making up their own blends from raw materials, the prices of which have risen of late. At no increase in cost to the consumer and involving no loss of quality, German synthetics and compounds, which formerly flooded this market, have been replaced by products of British manufacture.

From the manufacture of the basic raw materials to the production of the finished articles, the outlook for the perfumery, cosmetics and toilet preparations industry and trade is bright and it promises a steadily increasing turnover at home and almost unlimited scope in markets overseas.

Council Election Questions

NOMINATIONS for the council election of the Pharmaceutical Society must be in the hands of the Secretary by March 18 and until then it will not be known whether we shall have what it is hoped will be the only war-time election contest. (There were three elections during the 1914-1918 war.) The retiring members are Mrs. J. K. Irvine, Messrs. H. Antcliffe, C. Davis, T. Marns, E. S. Peck, H. Skinner and H. W. Wallis (treasurer), and it is interesting to note that the names include those of the Mayors of Leamington and Cambridge.

As the result of the elections during the past few years the constitution of the Council has been greatly changed, and the view has been put forward that there have been more than sufficient new members elected and that too many experienced members have been lost. The rank and file of pharmacists will not, we think, agree entirely with this view, for this is a young man's age, and, if a contested election does take place it is extremely likely that there will be more than one newcomer to the Council table. Nothing is gained by replacing the experienced members unless the novices can put forward ideas which have reasonable possibility of being carried into effect. There would appear to be the beginnings of an insurrectionary movement in recent resolution passed by the Blackpool Branch of the Society to the effect that members were "dissatisfied with the way in which the Pharmaceutical Council is administering its responsibilities and would appreciate greater efficiency in its administration of matters which concern the financial status of members."

The Pharmacy and Poisons Act, 1933, gave certain powers to the Council, and chemists all over the country would like to see the provisions fully implemented. They have been enforced against the Society's own members and should be against others who do not conform. The Society's case was stated in a memorandum to the Home Office a year ago, but there the matter has apparently been allowed to rest. It is now over six years since the Act came into force, and the decision in the *Coombes v. Hygienic Stores* case cleared up any ambiguity in Section 8 (requiring a pharmacist to be in charge of every premises where a chemist, or corporate body carrying on a pharmacy, sells drugs). During this same period the Society's income has grown to well over £100,000, due largely to examination, premises-registration and retention fees. Unfortunately, commitments have also grown, the new premises in Brunswick

Square being the cause of the greatest financial worry. Though attempts at economies have been made it must not be overlooked that the cost of building is increasing and that the loan charges cannot be reduced. There is also a weekly journal, the loss on which amounts to some £12,000 annually. A year ago the then treasurer expressed the opinion that if the Society's finances continued as healthy as they had been, all would be well, but since then donations to the Building Fund have diminished and it will be interesting to learn whether the views of his successor, who is due for re-election, are equally optimistic.

A Welcome Order

We have always contended that manufacturers, merchants and retailers when valuing their stocks for sale purposes were entitled, in some part at least, to take into account the cost of replacement. The Board of Trade, in their Prices of Goods (Permitted Increase) Order, 1940 (*C. & D.*, March 9, p. 177) have, in effect, agreed that, in fixing the value of any article or product held as stock, the owner is not restricted to assessing the sales price on the actual cost but is entitled to take into account the cost of similar goods for future delivery and for which he has given a definite order. Thus, if the stock of a particular product cost, say, 5s. per lb., and fresh supplies on order, but yet to be delivered, were purchased at 7s. 6d. per lb., the owner is entitled to average out the price for the purpose of valuing his stock. This is an equitable decision for, when sales prices decline, the owner of stocks purchased at higher prices has no option but to cut his loss.

Nothing over 10½d.

We learn from a reliable source that the chain store whose slogan has hitherto been "Nothing over sixpence" has decided to increase its maximum sales price and that in the near future it will be "Nothing over 10½d." The change from the original idea on which, to a large extent, the business has been built up has been found necessary owing to the general increase in merchandise values. Actually, we understand, no change in policy is involved and it is not proposed to stock goods of a value up to 5s. or 10s. To have maintained the sixpenny limit, however, would have considerably restricted the variety of goods on their counters. . . . Perhaps we shall now hear less about the penny, threepenny and sixpenny packs.

Income Tax—A Suggestion

Still another case has recently been brought to light where the Inland Revenue was the biggest creditor of a bankrupt, the debt relating to unpaid income tax due over a period of years. For many years past, every now and again some rocketing financier, coloured singer, theatrical adventurer, "big business" man, or gentleman of the Turf, has "let in" the Exchequer for a cool hundred thousand or so, and the excuse given by the authorities, when asked why these defaulters are given so much latitude, is that the accounts were exceedingly complicated and were the subject of investigation and discussion with the bankrupt's accountants. Such discussions can, of course, be unending. In this latest case, the Chancellor of the Exchequer, in reply to a question asked by a Member of Parliament, said "the Official Receiver has stated that several hundred thousand pounds were owing in respect of income tax and surtax." When the Member said the disclosure caused great indignation to

taxpayers who discharged their dues, Sir John Simon could only reply that "the proper course was to pay taxes promptly." . . . Most of us are left in no doubt on this point and, should we forget it, we are quickly reminded by receipt of the usual peremptory notice, printed in red, threatening prosecution. It is, therefore, all the more incomprehensible how these huge amounts are allowed to remain unpaid year after year. Could not the Inland Revenue adopt the same principle as Customs when dealing with disputes as to the amount of duty payable on imported goods—that is to demand as a deposit the immediate payment of an amount that will adequately cover the liability, any excess amount being remitted when the case is settled.

Anglo-French Industrial Agreement

A conference was held during the past week between representatives of the Federation of British Industries and the Confédération Générale du Patronat Français, representing French industry (see *C. & D.*, March 9, p. 177), Agreement was reached on a large number of matters, among them that the ultimate aim to be attained is for export trade to be so conducted as to ensure a fair return for producers with full regard to consumer interests. The two organisations have undertaken to promote agreements between individual industries of their respective countries, designed to encourage co-operation, eliminate uneconomic competition wherever occurring, and maintain price levels in the respective export markets that will ensure development of consumption. It was also agreed that negotiations should be undertaken as soon as possible between individual industries, not only to promote co-operation during the war, but also to serve as a permanent feature in economic relations between the two countries. They feel that, wherever possible, imports should be obtained from the two allied countries rather than from other sources. The delegations are constituting themselves a permanent Anglo-French Industrial Council, to maintain and develop the relations established by the agreement, and to take action thereon from time to time. The first task of the Council will be to investigate the extent to which individual industries in France and Great Britain can enter into negotiations on matters of common interest, and to arrange for such negotiations to take place.

Sterile Kisses

To many people, kisses connote contagion. Fond parents are enjoined by mothercraft textbooks not to lavish caresses upon their offspring, and fastidious spinsters offer their cheeks instead of their mouths to affectionate relations—all to avoid contamination. But every theory has its day and is challenged. A Californian Professor, Dr. S. L. Katzoff, medical director and psychiatrist at the San Francisco Institute of Human Relations, has put forward a defence of what an "Irish Times" leader-writer calls the "hygiene of osculation." The Professor claims that in any kiss that is worth calling a kiss sufficient heat is generated to render sterile the lurking microbes. This is good news, but we are in some doubt whether what applies to philo-cinematic Americans and, no doubt, to the passionate Latins, is equally applicable to the undemonstrative citizens of Britain. What is needed in this cold country is a sort of osculatory pasteurisation that works at less than fever heat. Either that or a lip salve with a high Rideal-Walker coefficient.

PERFUMES IN SMALLPOX

THE dedication of Thomas Fuller's "Exanthematologia," a treatise Part II of which is dated 1729, states that the author was suffering from gout and cataract when he dictated it, and that the book should be regarded as "only a rough Draught, and, as 'twere, a posthumous Work." The discursiveness that the modern reader will find in this account of smallpox is not peculiar to it nor to any one medical book of the period; and it must be recognised that Fuller was open-minded in his discussion of the benefits of inoculation, then an almost new and a much-controverted treatment. His classification of remedies used in the various stages of the disease has several features of interest. A case in point is the remarks on perfumes, which he introduces thus: "Besides these Cordials [mentioned in the previous section] that exagitate the Blood, and invigorate the vital Spirits, I wish we could find out also such as may have such Faculties as immediately affect the Animal Spirits. . . ." He continues:—

"For these Purposes, I propose to our Physicians to recal the Odorata into the Shop again, from whence they have of late been banish'd; for tho' Hippocrates would have the Physicians go perfum'd, that they might be the more acceptable to their Patients, the governing Fashion now a-days, is to think that all Sweets hurt the Head, and no body must endure them.

"But I know not how our Nature should come to be so strangely alter'd from those that liv'd three or fourscore Years before us; for tho' they seem'd to be in all Points of the same Nature with us, yet every one that was able to procure them had his Odorata.

"They had their sweet Waters, Pulvillo's, sweet Bags, Pomanders; their Cloaths and Gloves were perfum'd; their Canes had Civet Heads; all the Powder for the Hair was sweet-scented; every one carry'd in their Pockets Apoplectic Balsam; many of the fine Cakes, Puddings and Sweet Meats had Ambergrise in them.

"But as for the Apothecaries Shops, they were wonderfully stored with Odorata, as being Ingredients in the following Medicines, according to the Pharmac. Lond.

Aq. Cœlest.
Cordiales Femel.
Diarrhod. Abbat.
Lætific. Gal.
Pleres Archonticon
Diasatyrium magis grat.
Diamoschu dulce
Tryphera major
Troch. Gall. Mosch.
[Troch.] Bec. alb.

"Nay, they put them even into their Plaisters, as Empl. Stomach. Mag. & Emp. Metropropticon.

"And whereas no body in our Days can bear Rose-Water, and crieth Foh where they meet with it, our Shops were formerly order'd to have upon Occasion Aq. Mariæ Julep. Alexand. Jul. Rosat. Syr. Cardiac. all which were made with Rose Water.

"I acknowledge they are offensive to some Hysteric Persons; yet I have known where the Fœtids have disagreed, and Musk Pills have much comforted and strengthen'd Hysteric Women. "If they did really burthen or hurt the Spirits, those Physicians must be very grossly mistaken that prescribe (as Dr. Sydenham doth) Ambergrise for the Prevention of an Apoplexy."



Thomas Fuller, M.D.

Perfumes Stocked

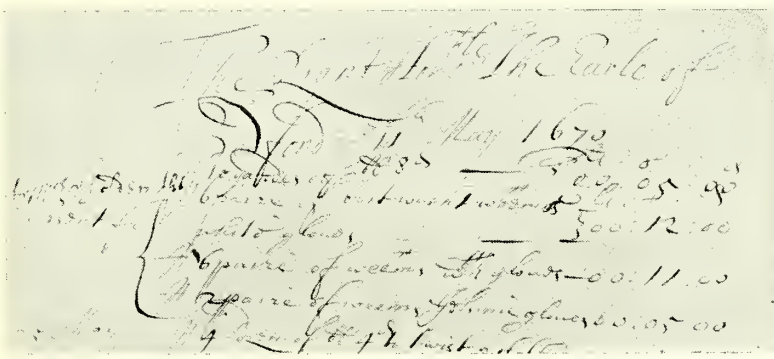
The list of perfumes kept in apothecaries' shops has been slightly abbreviated. Fuller names civet, musk and ambergrise as the three principal odorata—Sir Thomas Browne would have written "odorates." Of these he describes only ambergrise, beginning with the ingenuous statement: "It is not generally known what this is, but a certain Merchant assur'd me, it comes from a particular Whale." He praises it as "a general Restorative, and tho' a high, yet a most innocent Cordial, where-ever Nature needs Succour." He adduces its reputation as an antidote to the bites of venomous fish, and regards it as harmless, even in large doses: "I have seen a man eat 3ij. of it at a time, without any prejudice to himself, or any alteration, saving that he was chearfully dispos'd. . . ." It compares favourably, he claims, with "those volatile Chymical Spirits, which, like foreign Pigeons, tho' they may for a while augment the home-bred Stock, yet quickly deceive the Hopes of the Owner, and fly away, carrying with them those that were his own." Writers of modern text-books are lacking in such picturesque comparisons.

Note on Formulas

A brief note on the formulas of some of these preparations may be added. Apoplectic balsam contained the oils of cinnamon, clove, lavender, lemon, marjoram, mint, rue, rosemary, sage, rhodium, wormwood, amber and nutmeg (expressed), and balsam of Peru. It was carried in "little Ivory Boxes and Cane Heads," according to Quincy. Aqua cœlestis was distilled from cinnamon, clove, nutmeg, mace, cardamom, anise, fennel, thyme, mint, pennyroyal, marjoram, rosemary, citron peel, ambergris and other ingredients. The constituents of diasatyrium

included satyrium root, clove, pepper, ambergris, musk, cinnamon, nutmeg, mace and grains of Paradise. Trochisci bechici albi were made from orris and liquorice (with ambergris and musk as optional additions) massed with tragacanth mucilage made with rose water. Emplastrum stomachum magistrale contained, among other things, nutmeg, pepper, mace, clove, oil of mint, and storax. A pulvillo (a name with alternative spellings) was a perfumed powder used for sprinkling on a wig or

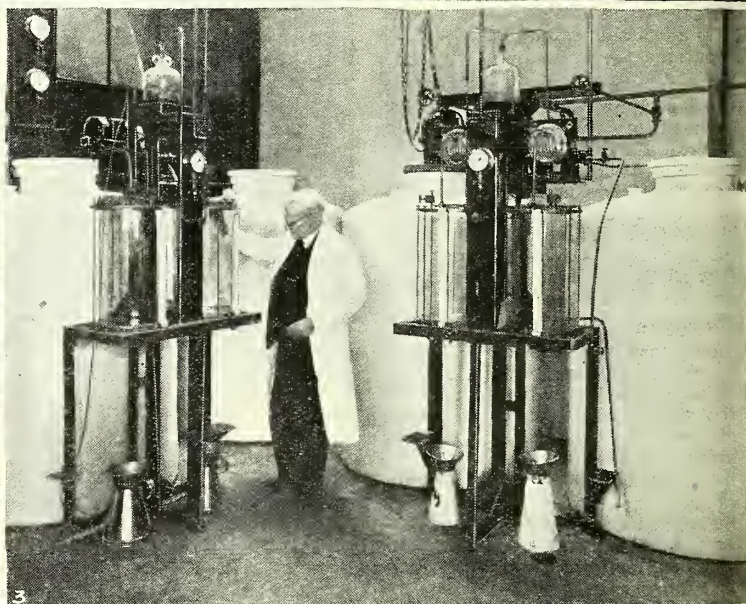
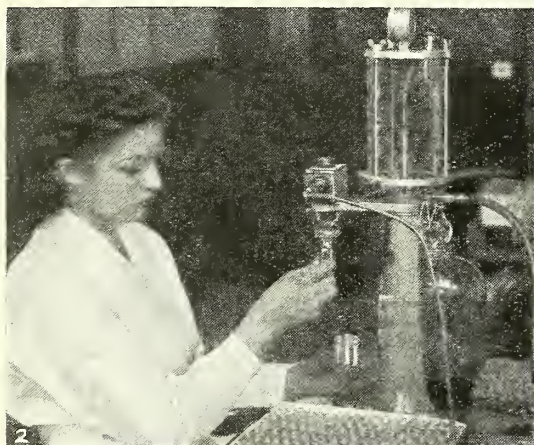
treatment of smallpox elsewhere about the person. The treatment of smallpox has obviously changed in the course of the past two centuries.



"Their Cloaths and Gloves were perfum'd."—Perfumed gloves were articles of commerce, as is shown by item "2 paire of weems Jasmine gloves" in last full line of invoice reproduced above.



PERFUME PRODUCTION AT WATFORD



1. Main entrance to factory, Saville Perfumery, Ltd. 2. Vacuum filling machine. 3. Perfume mixing and maturing tanks. 4. Corner of manufacturing laboratory. 5. Packing department.

VISIT TO SAVILLE'S FACTORY

IT was in 1925 that Saville Perfumery, Ltd., came into being and the first product to be introduced on to the market was June perfume, a product now well known in most parts of the world. The business started in a small way in the heart of Watford, in Hertfordshire, long before the town became the industrial centre it is today. From the outset steady progress was made, and it eventually became clear to those in control that the company's future lay in the specialisation of perfume manufacture. Under the direction of Mr. Francis J. Smith, present senior director, and Mr. G. S. Worssam, who retired from the business in 1938, this policy has been strictly followed, and, judging from the present capacity of the company, has proved to have been amply justified. The next step in the development of the business was the introduction in 1936 of Mischief perfume, a product which, we understand, achieved a remarkable amount of success in a comparatively short time. When Mr. Worssam retired, Mr. J. Savill Smith, son of Mr. Francis J. Smith, and who joined the company in 1930, was elected to the board of directors. During the past four or five years efforts have been made to increase the export side of the business, with the result that there is now developing overseas the same demand for the company's products as exists at home. With increased production, a move from the original headquarters of the company, which were in two separate buildings—one on each side of St. Albans Road, Watford—became necessary, and it was in 1937 that the company built the factory on the site in Rickmansworth Road which it occupies today, and which a representative of the C. & D. editorial staff recently visited. In order to correct any impression that the present-day enforced economy in personal expenditure is reflected to any serious extent in the demand for perfumes, it is worth recording that the bold step taken by the Saville Perfumery, Ltd., in introducing their latest perfume—Seventh Heaven—to the public at the very outbreak of war has proved to be justified by the degree of success the product has already had.

Tour of Works

Our tour of the factory took us through a small analytical laboratory where raw materials are examined and where hundreds of alcoholic dilutions of floral and synthetic concentrates are kept for use in the evolution of new perfumes. From here, we went through the manufacturing section of the building, a portion of which is shown in fig. 4, p. 214, where thousands of pounds worth of raw materials, such as civet, musk, floral absolutes and ottos, are stored and from which the company mixes its own tinctures. After preparation, the tinctures are allowed to mature for a minimum of two years. The alcohol used in the manufacturing process of the company's perfumes is stored until required in 500-gallon earthenware jars which are kept in a room built specially for the purpose and standing some fifteen feet above the ground-floor level. As the alcohol is required, it is fed by gravity through a system of pipes to the tanks in the perfume mixing and storing room, a corner of which is illustrated in fig. 3, p. 214. These tanks, of which there are six, hold about 300 gallons, and two are used for each of the company's perfumes, one for mixing and the other for part of the maturing process. After the many tinctures used in the individual perfumes have been mixed, they are passed through an electrically-operated portable homogeniser for some time to ensure thorough admixture, and from this machine they are pumped into the storage tanks referred to above. The requisite amount of alcohol is then run into the latter—the quantity being accurately recorded on a Wayne meter on the main supply pipe, and the whole of the contents of the tank are then subjected to a further process of mixing. This is carried out by means of a high-speed mixer which is lowered into the tank from an overhead travelling crane.

When this final stage of mixing is complete, the perfume is allowed to remain a considerable length of time in the tank to mature. From the maturing tanks the perfume is pumped through a filtering system and then transferred to the packing room and filled into the Gravfil vacuum machines by which arrow-necked bottles can readily be filled and which are fixed into the end of each packing bench, fig. 5, p. 214. The rest of the packing process—labelling, capping, polishing and cartoning of the bottles—is carried out in this department. Situated around the packing department are the "goods-in" section, the stock room for bottles, cartons, caps, etc., and finished-stock room, which is more or less a building within a building, being fire-

proof and burglar-proof. This system has been designed so that goods entering the factory can be moved round in one direction with the minimum amount of labour and expenditure. Leading directly from the finished stock room is the "goods-out" department. The company's general and managerial offices and board room are situated at the front of the building and are reached from the corridors leading respectively directly left and right of the front entrance. Much care has been devoted to the design of the factory grounds—a rose bed and shrubbery having been arranged at the front of the building, garage and sports field at the side, and canteen, social hall and A.R.P. shelters to accommodate the company's one hundred employees, at the rear. The dugouts, of which there are ten, for use in air-raids, are constructed of reinforced concrete and are provided with gas-proof trap doors, have a filtered-air supply plant which can easily be operated by hand, and from each shelter runs a tunnel communicating with an emergency exit.

RECENT RESEARCH

Artificial-Hormone Experiments.—Using injections of desoxycorticosterone, which he had prepared from cholesterol, J. Varangot ("La Presse Medicale," Feb. 3, p. 106) noted that it was possible to maintain in normal healthy life dogs whose suprarenal glands had been removed. Up to the present, he points out, the hormone extracted from the suprarenal glands of oxen has been, on account of its cost, used exclusively in rare cases of Addison's disease. Substituting a cheaper artificial substance for the natural extract will permit experiments to determine its utility in the treatment of shock.

Essential Oil of Evodia Littoralis.—According to Lahey and Jones (University of Queensland Papers, No. 13) steam distillation of the leaves of young trees of *Evodia littoralis*, growing in quantity near the New South Wales border, yields an oil with the following constants:—

Specific gravity at 15°	..	..	0.8487
Specific rotation	..	..	16.5°
Refractive index	..	..	1.4860
Ester value	..	..	0
Acetyl value	..	..	36

The oil was shown to contain ocimene, *d*- α -pinene, a mixture of sesquiterpenes and a new phenolic ketone, melting at 84°, which the authors have called evodionol.

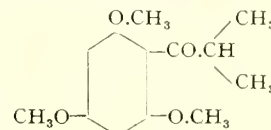
Efficiency of Bactericidal Agents.—Gerschenfeld and Brillhart ("American Journal of Pharmacy," 1939, 3, 430) report a series of bacteriological tests on ointment bases containing ammoniated mercury, phenol or mercuric chloride by the agar plate and agar cup plate methods using *Staphylococcus aureus* as test organism. Measurement of the inhibition zones indicated that the bactericidal agents were more effective when water-miscible bases were utilised than with the older type of fatty base.

Optically Pure *l*- α -Phellandrene.—By fractional distillation at 1 to 2 mm. pressure in the presence of a small amount of hydroquinone, Hancox and Jones (University of Queensland Papers, 1939, No. 14) have prepared a sample regarded as optically pure *l*- α -phellandrene having as constants:—

Specific gravity at 20°	..	..	0.8324
Refractive index at 20°	..	..	1.4724
Specific rotation at 20°	..	..	177.4°

The diene value of 186.5 (theoretical 186.6) confirmed the purity of the sample. The authors then showed that for a large number of samples the diene value bore an approximately linear relationship to the optical rotation when optically inactive constituents were present.

Oil of Eucalyptus Conglomerata.—Lahey and Jones (University of Queensland Papers, 1939, No. 12) describe the isolation from the oil of *E. conglomerata* of a new ketone, for which they propose the name conglomerone. This compound is a white crystalline solid of melting-point 62–62.5°, and the structure given herewith, which was indicated by a series of degradative experiments, was confirmed by its synthesis after heating isobutyryl chloride with trimethyl phloroglucinol in carbon disulphide solution, in the presence of ferric chloride.



PERFUMERY AND COSMETICS RAW MATERIALS

Views on the Position of Supplies

In response to an invitation to importers and British manufacturers of essential oils, synthetic aromatics and similar products, the following firms have given us their views on the position of supplies of the raw materials of the perfumery, cosmetics and toilet preparations industry. It is of interest to note that in all directions the volume of trade is reported to have increased during the past six months and that the demand continues good.

Stafford Allen & Sons, Ltd.—Starting with the fat oils, our two main specialties are true almond oil and true apricot kernel oil. So far there has been no difficulty in getting adequate supplies of almonds for the manufacture of the oil and we do not anticipate difficulties. In the case of apricot kernels, the importation of these has been completely prohibited, except from the Colonies, and the Colonial kernels are rather too expensive to enable the fat oil to be manufactured at a reasonable figure. Therefore the prospects of apricot kernel oil are not at all hopeful. Turning to essential oils, we have been able to carry on fairly successfully here. There have been big advances in values, one of the chief being nutmegs. These have more than doubled their pre-war price and the oil has gone up proportionately. Supplies can still be obtained but at a very high figure. Clove oil has been in fairly plentiful supply and the price has risen comparatively slightly. Sandalwood oil, East Indian.—The same remarks apply here. Caraway oil has been restricted and very high prices are being asked. Eucalyptus oil is another article that has advanced sharply and it seems impossible to get prompt shipments from Australia, but the stocks here have been sufficient to cover reasonable requirements. West Indian sandalwood oil.—There has been a brisk demand for this, owing to the German distillers being out of the market. We have increased the output of our oil. Patchouli oil has been one of the outstanding features as one would think a luxury oil like this would have a very small demand in war-time. The demand seems to have kept up and owing to a great shortage of leaves the price has fully trebled itself, and even at present high figures, very little is offering. Juniper oil is another very difficult oil, the genuine product being practically unobtainable. We are finding a good demand for isolates such as eugenol, iso-eugenol, geraniols, rhodinols, citral, and eucalyptol. Palmarosa and geranium oils, from which the isolates are made, have shown a slight advance but have not had any spectacular rise.

W. J. Bush & Co., Ltd.—We submit the following as our outlook on supplies of perfumery raw materials, and would add we are diffident about expressing our opinion on this matter. In these days, however, this diffidence is more pronounced than usual, for over and above the usual factors which govern prices of oils on this market, such as harvest, surplus stocks from previous years, etc., unusual climatic disturbances, etc., there must now be included the difficulties and increased cost of transport, currency restrictions, government permits, etc., with which must be included the actual interference due to the war itself. When all these factors are taken into consideration, it is obvious that the result will be irregular deliveries and increased prices. As regards synthetics, the unusual demand on British manufacturers has, in a very great measure, been successfully met, but owing to the restricted supplies of raw materials used in their manufacture, difficulties may be experienced which may hamper production and lead to periodic shortages. For those producing toilet and perfumery articles, one might sum up the position as follows: They can expect to get supplies of all raw materials which they have been in the habit of purchasing in the past, but the quantities may be restricted. Deliveries will be a most uncertain factor, so that to avoid hold-ups in production, orders should be placed well ahead of actual requirements. Today's prices cannot be expected to recede, and in some directions considerable increase can be anticipated.

C. A. Charpentier.—We have pleasure in giving you a brief report on market conditions for perfumery raw materials. Essential oils.—Markets reacted very strongly to events of the past few months. Almost immediately a general advance in prices set in and many stocks were quickly absorbed, so that in some instances it was impossible to satisfy all needs. Prices

are now settling down a little, but many products continue to suffer from the consequences of the war. French flower oils.—Rose.—Sales have been active and stocks are small. Next crop is expected to be dearer. Jasmin.—All available stocks at the end of September were taken up in a very short time and some orders could not be fulfilled. At present this product is completely lacking but the demand continues. This means that the next crop, even if it is abundant, will be quickly absorbed. Orange flower.—The orange flowers are likely to be affected by the intense cold of the winter and prices will be higher. Oak moss, orris.—Prices have advanced. Aromatic chemicals.—Owing to the position of raw materials our suppliers are able to offer only strictly moderate quantities of the usual synthetics; the tendency is firmer in most cases. Certain products like aubepine (ex paracresol), heliotropin, phenyl ethyl alcohol, coumarin, etc., are in short supply with prices tending to higher levels.

Dubuis & Rowsell, Ltd.—As British manufacturers of perfumery raw materials we naturally made provision for the change over from peace to war-time conditions, because we knew that some of the products of vital importance to us might disappear from the market and others become scarce owing to labour and transport difficulties. We have, therefore, been able to give our customers the same quality products as hitherto, and we consider that we shall be able to continue to do so. It is obvious that, in spite of the comprehensiveness of our arrangements, we cannot override all the difficulties of replenishing our stocks of the primary raw materials, which this trade gathers from all corners of the world. We feel that there will be a scarcity of certain products and a general rise in prices, resulting in a commensurate increase in the cost of the finished perfumery raw materials. Here and there it may be necessary for the art of the perfume chemist to produce substitutes. Our laboratories and research staff are continually engaged on investigations of this character.

Government of Mysore.—There are ample stocks of Mysore Government sandalwood oil in Europe which should be quite sufficient for normal requirements for some time to come. The authorities in Mysore are taking precautions to safeguard future supplies and to continue to be able to guarantee the high quality of this product. Any rise in the price of Mysore sandalwood oil since the beginning of the war has only been levied to recoup the additional expenditure on higher freights, war risk insurance, etc. As was anticipated, demands for Mysore sandalwood oil have increased since the outbreak of hostilities. The Trade Commissioner for Mysore in London—Grand Buildings, Trafalgar Square, W.C.2—will be pleased to answer any inquiries regarding this oil.

E. Guillevic & Co., Ltd.—Since the commencement of the war we have experienced a steadily increasing demand for a wide range of raw materials of the perfumery and cosmetics industry. At the moment stocks of some essential oils are reasonably good while supplies of a few others are negligible, and the outlook for fresh arrivals uncertain. While we find a steady trade in most citrus oils, an outstanding feature has been terpeness lemon. Substantial business can also be recorded in carmine. The range of synthetic aromatics has shown increasing sales with consumers taking more interest in these manufacture products. While we think the current level of sales values will at least be maintained we would not be surprised if in a few instances, where prices soared early in the war, there was not some slight reaction. There is, of course, a limit to the value of a natural product, particularly where there are satisfactory synthetic substitutes. The question of supplies of imported products in the future depends on many circumstances, such as freights, the purchase of foreign currency, and so on, and for these reasons we would not like to forecast the outlook.

Mallagh & Co.—This country, of course, is not by any means self-supporting in regard to supplies of essential oils and natural flower oils, and to some extent, although there has been substantial improvement, the same observation applies to synthetic chemicals and perfumery concentrates. In the short period so far of the war, we have all seen the usual results in regard to restricted supplies and abnormal demands. Transport has been

difficult, and supplies have been curtailed in consequence. The demand, of course, has been very much more than normal and so prices have risen. But this does not of necessity mean that production has decreased, and we can see no reason why it should, providing of course always that transport is available for the delivery of raw materials to the manufacturers. Buyers everywhere can help considerably to conserve supplies and incidentally assist in keeping down prices. From our own calculations, we can state quite definitely that the increase in prices of raw materials is out of all proportion to that of complete compounds, so that buyers of the latter products are today in a better position in so far as their costs have not risen so much. Apart from this, the stocks of raw materials held by perfumery and cosmetic manufacturers are probably very much more than normal, and yet our experience is that the demand is still as great as ever. If users purchased the ready-made blended compounds and allowed the manufacturers of these products to retain the stocks of raw materials, the result would, we believe, be mutually beneficial. We all need assurances for our future supplies, and economies in the way suggested might be very helpful.

Polak & Schwarz (England), Ltd.—We welcome the opportunity of contributing a statement on the future outlook for supplies of perfumery raw materials for the cosmetic and allied industries, which you propose to publish in your special perfumery number. As you are aware, we moved to our new factory some six months prior to the outbreak of war, and the fact that we also had associated factories established in Holland, France and the U.S.A., prudently planned and organised to meet the situation that exists today, has enabled us to maintain supplies of our specialities practically without interruption since the war. It is true that replacements of raw materials take considerably longer to arrive from overseas but by careful planning we shall endeavour to maintain the service and continuity of supplies that has always been the keynote of P. & S. policy; our ability to continue to do this will naturally depend to a large extent on whether or not additional restrictions are imposed on the purchase and importation of the raw materials essential to our industry. Meanwhile, we can report a steady expansion in sales, particularly in export, which we are developing especially to the British Empire. Many firms found their normal source of supply for specialities completely cut off last September. We are glad to have been able, in many instances, to successfully match key compounds and other essential perfumery materials, and our research department is entirely at the disposal of the trade.

With regard to the future trend of prices of essential oils and aromatic chemicals, all of these have, of course, advanced considerably since the outbreak of war when stocks in dealers' and importers' hands were none too plentiful and indeed, in many cases, were being sold at prices which showed very little profit either to the importers or producers. The prices of some materials have receded from the high values which ruled in the early months of the war. Nevertheless, all perfumery raw materials are very much above pre-war levels. We are inclined to think that present values will be more than maintained and will, in fact, reach higher levels, should the war be protracted. The costs of freights, insurances, packing and all other incidental charges are, of course, important factors in arriving at the price levels of these commodities.

H. Rubeck.—In reply to your invitation that I should express my views as to the supplies of some of the raw materials in which I specialise, I will mainly confine myself to the position as it exists at present. Of Spanish oils of spike lavender, rosemary and thyme fair supplies are on hand. In the case of shipments from Spain, goods must be paid for before shipment is allowed, prices being controlled by the Spanish Government. Parcels, however, occasionally reach England through unusual channels owing to barter trade. Crops were but moderate, and good stocks should be held by all. French oil of lavender and lavandin.—The position regarding lavender oil does not appear to be anything like as acute as was pictured, but, on the other hand, the bulk of the lavandin was bought up by America soon after the crop whilst its price remained below that of spike lavender oil. Rhodesian oil of sweet orange.—Good stocks are available here, and our factory in Rhodesia has decided upon production in 1940, which will begin in May. Oil of lemon, Sicilian.—The crop is estimated at about 10 per cent. below that of a year ago. Prices remain high, the reason for this being given as mainly owing to heavy overhead expenses (probably taxation), and scarcity and expense of packing materials.

R. C. Treatt & Co., Ltd.—The problems which producers, exporters and importers of essential oils have to face are all very similar. We propose to confine ourselves to those of East Africa, about which we have first-hand knowledge. Neither Zanzibar nor Seychelles have any difficulty over raw material for the production of eugenol oils of which they normally provide some 250 tons a year, but they are badly hampered by difficulties over packages, fuel, increased and uncertain freights and insurance rates and, above all, by the uncertainty of securing shipping space. These same difficulties apply, although perhaps to a lesser degree, to the smaller East African producers of such essential oils as geranium, bitter orange and lavender. We think that all these complications are likely to increase everywhere and make for higher prices. Nobody can tell what may happen but, in any case, while the war lasts, our opinion is that the premium for all oils actually available as against shipment quotations will rightly and properly increase.

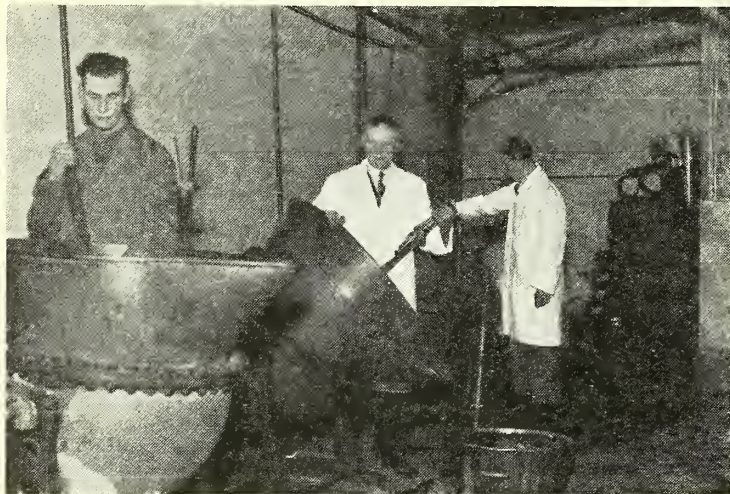
Wilson & Mansfield, Ltd.—Since essential oils and raw materials for perfumery are mostly imported from all parts of the world, where conditions vary considerably, it is not possible to express a general opinion on the outlook for supplies. In some cases genuine shortages were, for a number of reasons, evident before hostilities commenced, and in others, scarcity has recently occurred owing to the exceptional demand which has been experienced during the last six months. In the case of those materials produced in countries little affected by the war it is possible that the higher prices now ruling may result in increased production, although, of course, some time must elapse before the improvement in supplies is felt here. In this category may be included anise (star) and cassia oils from China, and some of the American oils. On the other hand, shortage of labour caused by mobilisation in some countries, especially in France and the French colonial empire, may cause a reduction of production. Indeed, the shortage of man-power in the South of France is already becoming acute, and even if the collection of the flowers can be, and in fact is, carried out by women, it may well be impossible to produce the normal quantities of such important materials as lavender, neroli, jasmijn, etc. Shortages of labour are also reported from the French colonial empire, and we are advised that in Madagascar the distillation of ylang ylang has been seriously affected.

Apart from these considerations, the question of the supply of foreign exchange as well as shipping facilities are important factors in the supply of many imported perfumery raw materials. If, in neither case, these two factors have yet become of serious importance, it would seem unwise to ignore the possibilities of some restrictions as time goes on. As far as foreign exchange is concerned, however, the danger of restriction in supply would seem to have been removed in the case of France and her colonial empire by the Anglo-French Economic Agreement. Fortunately, these territories produce large quantities of many of the most important raw materials, upon which it may well happen that we shall have to rely to a greater extent than in the past.

Chas. Zimmermann & Co., Ltd.—After six months of war there is little to be said as regards essential oils. The first few months witnessed sharp increases in prices, but during the last month or two, a lull has enabled values to become more steady, and in some cases there have been slight reactions. As regards essential oils, there are a few which are rather short at the moment, notably bergamot, Australian eucalyptus and all descriptions of patchouli, but the difficulties in connexion with these go back to pre-war. As regards synthetic and aromatic chemicals, prices have increased on a line with essential oils, on account of the shutting off of the German market, which has been largely responsible for the low prices experienced in recent years, and it is feasible to expect further increases in these materials in the future. There is one pleasing feature which we are able to record, and that is that many countries, especially the Empire markets, are now turning to this country for their perfumery bases and floral ottos, on account of the European market having been cut off. British perfumery has made considerable progress in the last ten years, but it has been found difficult to oust the old-established Continental products. The present time has given an opportunity in this respect, and we personally are able to report a good business abroad in our perfumery floral ottos and bases. British consumers have little to fear in changing over to British-made compounds, both as regards quality and price.

AN EIRE PHARMACEUTICAL INDUSTRY

OF the several pharmaceutical industries established in Eire within the past six years few have proved so successful as that for the making of pastilles, glucose products, lozenges and tablets opened up by Rice, Steele & Co., Ltd., Dublin, just four years ago. For Ireland, this was an entirely new venture. The factory was located in North Lotts, in the heart of Dublin. Many Irish chemists who heard of the experiment were dubious of its success until the first batches of the firm's products appeared on the market, but in quality, flavour and appearance the pastilles won widespread praise. Not only was



Pastille gum in process of boiling

the quality excellent, but chemists were glad to note that particular attention was being paid to attractive packing and well-designed show material. It was not surprising that the new pharmaceutical enterprise advanced rapidly until today it has been found necessary to move into larger and more commodious premises at Brabazon Street, Dublin, where a modern factory with over 13,000 sq. ft. of floor space has been established.

Policy and Organisation

Since it was launched in 1936 the organisation has followed a policy of continually adding new products to the range of manufactures. One of the new lines is Cheks, a cough sweet with distribution from end to end of Eire. Paraseptic cough pastilles, another product recently marketed, have also secured a wide demand, and the glucose confectionery in varying flavours and forms has established itself in popularity. Two years ago the firm broke new ground by successfully introducing a range of toilet preparations under the name Resco, to sell at popular prices, including brilliantines and other hair preparations. Added to this wide variety of products the firm are manufacturers of such well-known proprietaries as Carragol, Mutesco, and Denton, all of which have become established in the retail trade in Eire. All products manufactured are on the approved list of the Irish Drug Association and their sale is confined to pharmacists and druggists. The manufacturing, marketing, and distribution side of this Eire industry is under the sole direction of Mr. George Rice, who has been associated with both the retail and wholesale trade in Ireland for several years. The sales side is in the hands of Mr. F. H. Steele, who was for many years attached to the staff of Smith & Co., London. To turn out the finest pastilles, lozenges, and glucose lines would in itself be of little use if the distribution and organisation behind them was not equally good. Mr. Rice has seen to this aspect of the firm's activities, and has placed on the road a service of motor vans that make deliveries from Dublin to every part of Eire. Rice, Steele products thus reach the chemist direct from the factory.

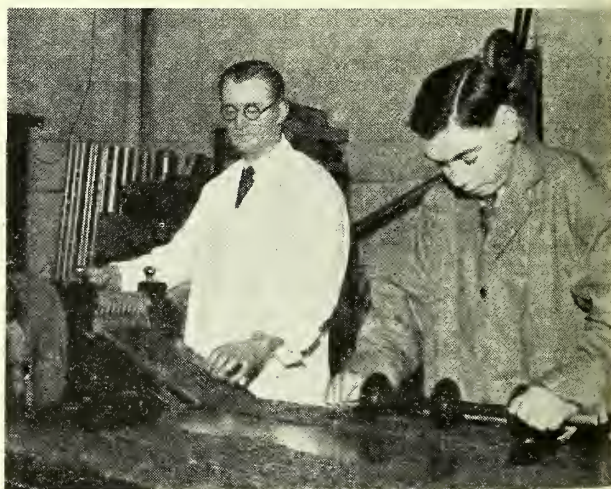
Pastille and Lozenge Making

For the retail chemist who is selling Rice, Steele pastilles across the counter a tour of the new factory would prove of great interest. In the pastille department the first process is the boiling of the gum, which is the basis of all pastilles and is heated

in 200-gallon steam-heated copper pans. After it has reached the required consistency, medicaments and flavours are added to the gum, and the mixture is poured by girl workers into starch moulds. Each pastille is formed separately in its own mould (no mass-production method is in use). Pastille manufacture is a highly skilled operation, in which time and temperature play an important part. When the trays of starch moulds are filled with gum they are taken to special cork-insulated chamber, and here for a period of about four weeks the pastilles in embryo are baked at an even temperature of 110° Fahrenheit. By the time they have assumed a consistency that enables the next process to be carried out. Each pastille is separately cleaned off and either dipped or crystallised. Then back they all go to the hot chamber for another week's baking before they are ready for packing. In all, it takes five to six weeks to make a good pastille. Lozenge making is another extremely interesting side of the firm's activities. Here the basic raw material is pulverised sugar. The mixing is carried out in a special power mixer, to which the medicament and binding agents are added. Mixing finished, the malleable mass is rolled out to the required thickness on slabs, and then passed on to cutting machines in which the stamping takes place. The final process is to bake the newly-stamped products at a temperature of 50° Fahrenheit for varying periods, according to the type of lozenge.

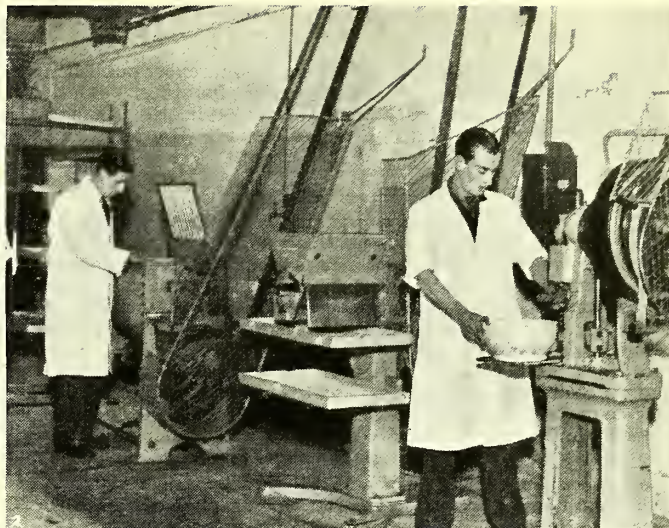
Glucose Products

Glucose products are one of the most important products made at the factory. On the day the writer visited the works the glucose department was busy making glucose barley-sugar sticks. Fifty per cent sucrose and 50 per cent glucose go to the making of the sticks. The mixture is boiled, then poured on to water-cooled plates and the colouring and flavouring worked in. The soft, amber-coloured mass passes next through a power-driven machine with toothed rollers, and emerges as the other end in strips with the familiar plaited appearance. Then a boy cuts the strips with a set of cutting rolls into the required lengths. After being left to harden, the strips are ready for filling into the large glass jars illustrated in the fifth picture on opposite page. Barley-sugar sticks, one of the oldest boiled sweets, a great favourite with children in the Victorian era, continue to hold their own against more modern confections; they are particularly suitable for sale by chemists.



Shaping and cutting barley-sugar sticks

Having established itself in Eire the company is now extending its sales organisation to Northern Ireland, and already these Dublin-made products are to be seen in Belfast pharmacies. From Belfast the trade will be extended during the coming months until the whole of Northern Ireland is taken in.



DUBLIN-MADE MEDICATED CONFECTIONERY



1. Pouring medicated pastille gum into starch moulds. 2. Section of the tablet-making department. 3. Packing finished products for dispatch. 4. One of the pastille drying rooms. 5. Making up orders for medicated confectionery in the stock room and order-assembly department.



TRAVANCORE LEMONGRASS INDUSTRY

THE following information is taken from a report published in the "Bulletin of the Imperial Institute," South Kensington, London, S.W.7 (Vol. xxxvii, No. 3), and previously submitted to Peirce, Leslie & Co., Ltd., by Mr. I. W. Campbell (a member of their staff at Cochin).

Conditions of Growth

The cultivation of lemongrass in India is now restricted to remote country districts in the northern portion of the Travancore State, where the elevation ranges from sea level to about 500 ft. There used to be a little cultivation in Central and South Travancore, but this has now ceased entirely, and no supplies of oil have been received from these districts for some years. Cochin is the port of shipment, and in respect both of total exports and market importance, what is known as Cochin lemongrass oil easily heads the list as compared with the produce of other countries. The chief marketing towns, which form more or less the hub of their respective districts, are Kothamangalam, Alway, Muvattupuzha, Thodupuzha and Ferumbavoor.

Lemongrass is a hardy plant and will grow in almost any kind of soil from rich loam to laterite. The type of soil does, however, affect the oil content of the grass. The more fertile the soil the lower the citral content, although the yield is high. In laterite soil the citral content is high, but the yield is naturally less. Even in areas where the grass receives some attention, growth is scattered. Patches of land here and there may be quite bare and elsewhere there may be prolific growth. The root is perennial, and an area once planted will continue bearing for some years with little or no attention. The life varies from six years in some districts to fifteen in others, but the majority of reports indicate that eight to ten years is the normal life of the grass, the most productive period being from the second to the sixth year of growth. When ready for cutting, the grass is about 4 ft. high. The part which contains the oil is the round stalk at the foot of each blade in the heart of the clump. This portion varies in length from 6 in. to 1 ft. It is found that it is bad to cut during or soon after rain. The oil mounts highest during dry weather and it is then, therefore, that the best results are obtained. A continuously wet season considerably affects the yield of oil. Sowing commences as soon as there has been sufficient rain to moisten the soil well. The ground, which only requires to be cleared of scrub and roughly ploughed, is usually prepared in advance during the dry weather. Normally, the first showers occur about the second half of March, and this can be taken as the sowing period. If weather conditions continue normal (not too much or too little rain; plenty of sunshine), the young grass will be ready for cutting after about six or seven weeks. Areas that are already in grass will be ready for cutting much sooner. The harvesting season may be taken therefore as May–December. There are normally only four cuttings during this period, about six or seven weeks apart. First cutting, May–June; second cutting, July–August; third cutting, September–October; and fourth cutting, November–December.

Yield

The second and third cuttings usually yield the most oil. In a fertile district such as Kothamangalam, it is possible, given favourable weather conditions, to get five cuttings, provided also that the price is sufficiently attractive to induce cultivators to take another cutting. Cultivation is unorganised and haphazard, and as the producing areas are so scattered and in such wild country, it is difficult to estimate the acreage under cultivation and practically impossible to gauge the potential crop growing thereon. The places where lemongrass is found growing are some distance farther inland from the marketing centres already mentioned. In the rural districts, which are the main producing areas at the present time, firewood is abundant, cheap and often free in the neighbouring forests, whilst the ground also conserves the moisture better. Therefore the grass comes on more quickly at the beginning of the season. In the urban areas around the towns the cost of production is, just now, prohibitive, on account of the scarcity and therefore high cost of firewood. Water, also, is less readily available. Consequently cultivation in the urban areas has been given up in favour of ginger, pepper and turmeric, which have been much more remunerative crops till now.

After cutting, the grass is taken for distilling. This operation is simple and the methods used are primitive. Mr. Campbell quotes a description of the process taken from a report by Mr.

Ramaswamy Iyer, of which the following is the substance. A large factory with up-to-date, modern equipment and elaborate machinery is not necessary for the extraction of lemongrass oil. The scene of operations is a small thatched shed. At one end of the shed a large cylindrical vessel, about 5 ft. high and about 12 ft. in circumference, rests on a rude hearth. Thence a pipe projects horizontally, discharging into a coiled pipe fitted into a tub containing cold water. At the outlet of the coiled pipe, another small vessel is placed to receive the contents discharged. At one side of the big vessel there is a manhole, into which small bundles of grass are deposited. For each distillation about 250 to 300 bundles are put into the vessel, together with sufficient water, and the opening is then firmly closed. The hearth is then set ablaze, and gradually the process of distillation commences. The oil passes off as vapour, condenses in its passage through the pipe, and discharges into the small vessel. It is necessary that the tub should be frequently filled with cold water in order to effect condensation. The discharged matter in the small vessel is a mixture of lemongrass oil at the top and water at the bottom. A syphon tube arrangement fixed to the collecting vessel facilitates the discharge of the watery matter, leaving the oil behind.

Commerce

The following particulars of shipments of lemongrass oil from Cochin during the period 1925–38 were supplied by Messrs Peirce, Leslie & Co.:—

1925	..	..	216 tons	1932	..	..	170 tons
1926	..	..	267 tons	1933	..	..	177 tons
1927	..	..	258 tons	1934	..	..	302 tons
1928	..	..	351 tons	1935	..	..	353 tons
1929	..	..	315 tons	1936	..	..	331 tons
1930	..	..	175 tons	1937	..	..	356 tons
1931	..	..	198 tons	1938	..	..	379 tons

The heavy falling off in shipments during the period 1930–33 was due to the slump and low prices then prevailing, which was followed by the inevitable reaction—a steep rise in price during 1934, resulting in an energetic programme of new planting during 1934 and 1935. This in turn brought about a collapse of the market in 1936, since when the market has been on an abnormally low level. Thus, the price in 1934 rose as high as 4s. 6d. per lb., c.i.f. London, but since 1936 the highest and lowest prices touched have been 2s. 3d. and 1s. 3½d. respectively; during the greater part of the period since 1936 the ruling price has been below 1s. 6d., and at the end of August 1939 business was done at 1s. 4½d., c.i.f.

INDIAN CHEMICAL IMPORTS

THE following particulars of imports of drugs, medicines and soaps, during the six months April 1 to September 30, 1939 with comparative figures for the corresponding period of 1938 are given in a survey of the import trade of India compiled by H.M. Trade Commissioner in India.

Drugs and Medicines.—After suffering a setback in 1938 to Rs. 99.8 lakhs, the value of imports under this heading rose to Rs. 119.9 lakhs. Imports of camphor rose from Rs. 6.7 lakhs to Rs. 8 lakhs; of these imports, Japanese supplies fell slightly from Rs. 4.2 lakhs to Rs. 3.9 lakhs, but imports from Germany increased from Rs. 1.7 lakhs to Rs. 2 lakhs and from other countries generally from Rs. 0.8 lakhs to Rs. 2 lakhs. Imports of quinine salts, which were valued at Rs. 12.7 lakhs in 1938 amounted to Rs. 12.3 lakhs in 1939. Of this, the United Kingdom supplied Rs. 3.6 lakhs (Rs. 3.4 lakhs in 1938), while imports from Germany fell from Rs. 7 lakhs to Rs. 4 lakhs. Java sent Rs. 0.7 lakhs, compared with Rs. 0.4 lakhs the previous year, and other countries Rs. 4 lakhs, against Rs. 1.9 lakhs the previous year. Proprietary medicines rose sharply from Rs. 27.5 lakhs to Rs. 40.6 lakhs. The United Kingdom share rose from Rs. 11.9 lakhs to Rs. 18.6 lakhs; Germany increased the value of her shipments from Rs. 6 lakhs to Rs. 8 lakhs, and the United States of America increased hers from Rs. 6 lakhs to Rs. 7.25 lakhs.

Soap.—Total imports of soap in 1939 were 16,537 cwt. valued at Rs. 11.9 lakhs, as against 17,033 cwt. valued at Rs. 11.2 lakhs in 1938. Imports from the United Kingdom rose from 10,579 cwt. valued at Rs. 7.8 lakhs to 11,970 cwt. valued at Rs. 8.9 lakhs. Of the 1939 aggregate total, 12,654 cwt. valued at Rs. 10.7 lakhs were toilet soaps. Imports of household and other soaps continued to decline, with the development of local manufacture

TRADE REPORT

Quotations recorded for pharmaceutical chemicals, crude drugs, essential oils, etc., represent the spot prices for wholesale quantities of standard quality. C.i.f. shipment quotations do not include marine war risk insurance and other abnormal charges which arise under the present state of emergency

28 Essex Street, W.C.2, March 13

BUSINESS in most markets during the past week has continued on satisfactory lines, the general tone and values remaining fully steady. Conditions in the PHARMACEUTICAL CHEMICALS market continue on the quiet side, but there appears to be no weakening of prices on this account. A fair trade in small lots of ACETANILIDE is reported, and the market is fully steady. Some scarcity of AMIDOPYRINE is apparent, but the shortage has had no effect on the price, which is steady to firm. Makers' prices for ASPIRIN and BISMUTH SALTS remain steady at the scales recorded in last week's issue. The continued firmness of EMETINE HYDROCHLORIDE is a noteworthy feature of the market. It will be noted that in the Exchange Rates table at foot of this column the currency values in Buenos Aires, Shanghai and Yokohama are now included—an addition that should prove of value on account of the number of drug-trade commodities passing through these centres.

Crude Drugs

Many commodities in this market show a firmer tendency, and a good volume of routine business is reported during the week. It is of interest that the very fair Continental export business reported last week is being maintained. Stocks of a number of important commodities continue limited. In AGAR a fair demand is reported, with spot supplies at a low level. ALOES remain firm, with steady business in Curaçao passing. BALSAMS are fully steady as quoted, and supplies of all descriptions are short. BUCHU is quoted rather cheaper for shipment. Supplies of CARDAMOMS continue short, with little business passing. The steady routine trade previously reported in CASCARA SAGRADA is being maintained. CASCARILLA is reported scarce on spot. A fair amount of inquiry continues to be received for DERRIS ROOT, but little business is recorded. Dealers' prices for DIGITALIS LEAVES remain firm on a short supply. ERGOT remains firm, with spot supplies severely limited. Some shipment business in Portuguese is reported. GAMBAGE is short on spot, with only some odd cases available. HONEY is still in restricted supply and firm as quoted. Little business is passing in Japanese MENTHOL, but a good sale continues for Chinese. Shipment quotations for Spanish-Italian MERCURY show no further advance on last week's prices. RHUBARB continues firm, with spot supplies short. TRAGACANTH is unchanged in price and the demand is about steady.

Essential Oils

Only a moderate trade in these products can be reported, with few price changes to record. Business in ALMOND is still on the quiet side, with spot slightly dearer. A little more interest is being shown in NISE (STAR), and shipment prices are reported slightly firmer. Business in Brazilian BOTS DE ROSE is still of small account, with dealers' prices steady. CARAWAY remains on the quiet side, but values are unchanged. The market for CASSIA is firm and spot is quoted slightly dearer; no shipment offers available. Java and Ceylon CITRONELLA remain quiet. Madagascar CLOVE continues in short supply. Shipment offers of Australian EUCALYPTUS are still restricted. GERANIUM continues steady, with only a small business passing. Some rise in price of new-crop Sicilian LEMON is reported, stated to be due to possible political developments. LEMONGRASS remains dull at previously quoted prices. Spot supplies of PALMAROSA are still limited, but prices are unchanged. A fairly good trade is reported in Japanese PEPPERMINT, and the market is steady. Chinese oil is selling well. Bourbon VETIVER prices are unchanged, supplies limited.

Exchange Rates on London

The following is a list of the chief Continental and other exchange rates at the opening on Wednesday morning:—

Centre	Quoted	Par	March 6	March 13
Amsterdam ..	Fls. to £	12.107	7.55*	7.55*
Brussels ..	Belgas to £	nominal	23.77*	23.67*
Buenos Aires ..	Paper pesos to £	—	—	17.07*
Copenhagen ..	Kr. to £	18.159	20½	20½
Canton ..	Esc. to £	110	108	108
Cardiff ..	Plas. to £	25.24½	38.75	38.25
Colon ..	Lire to £	92.46	77	76
Montreal ..	Dols. to £	4.86½	4.45*	4.45*
New York ..	Dols. to £	nominal	4.03*	4.03*
San Francisco ..	Kr. to £	18.159	17.70*	17.70*
Shanghai ..	Fr. to £	124.21	176½*	176½*
Stockholm ..	Per dollar	—	—	4½
Yokohama ..	Kr. to £	18.150	16.90*	16.90*
..	Per yen	28.	—	1s. 2½d.
..	Frs. to £	22.2115	17.90*	17.90*

* Rate fixed by Bank of England.

Bank rate, 2 per cent.

Late price changes are given in the Coloured Supplement

Pharmaceutical Chemicals, etc.

THE markets continue to be rather on the quiet side but there appears to be no weakening of prices on this account. Amidopyrine is reported to be scarce. Quinine remains firm at unchanged prices.

ACETANILIDE.—Market steady, with a fair trade in small lots reported. B.P., lewiss., quoted at from 2s. 3d. to 2s. 6d. per lb., as to quantity.

AMIDOPYRINE.—Reported scarcer. Dealers' prices steady at the recent advance: One cwt., 18s.; smaller quantities, up to 20s. per lb. for crystals, with powder 3d. per lb. extra. Replacements will cost over 20s. per lb.

AMMONIUM ICHTHIOSULPHONATE.—No change in dealers' prices: One-cwt. lots, in 1-lb. tins, 3s. 3d.; smaller lots, 3s. 6d.; in 14-lb. tins, one cwt., 2s. 9d.; smaller lots, 3s. per lb., ex store.

ASPIRIN.—Makers' prices are as follows:—

Quantity	In containers of					
	1 lb.	2 lb.	4 lb.	7 lb.	14 lb.	28 lb.
1 lb. and under 4 lb. ..	s. d. 3 10½	s. d. 3 9				
4 lb. and under 7 lb. ..	3 9½	3 8				
7 lb. and under 14 lb. ..	3 8½	3 7	3 7½			
14 lb. and under 28 lb. ..	3 7½	3 6	3 5½	3 6½		
28 lb. and under 1 cwt. ..	3 6½	3 5	3 4½	3 5½	3 5	
Not less than 1 cwt. ..	2 11½	2 10	2 9½	2 9½	2 9*	3 3½
" " " 5 cwt. ..	2 11	2 9½	2 9	2 8½	2 8½*	2 8
" " " 10 cwt. ..	2 10	2 8½	2 8½	2 7½	2 7½*	2 7

* 8 × 14 lb. and upwards in one delivery, ½d. per lb. less.

Sale is subject to an undertaking on part of buyer not to re-sell any quantity at prices or terms below scale for such quantity current at time re-sale is made, and, if he converts the aspirin into tablets, not to sell any quantity of tablets at prices or terms below the scale for such quantity current at time of sale.

ATROPINE.—Makers' prices are as follows:—

	oz.	4 oz.	25 oz.	100 oz.
Alkaloid ..	17s. 6d.	17s. 6d.	16s. 6d.	16s. 6d. oz.
Sulphate ..	14s. 6d.	13s. 6d.	13s. 6d.	12s. 6d. oz.

PACKAGES	Under 5 gm. or ½ oz.				
	5 gm. to 25 gm. or ½ oz. to 1 oz.	25 gm. or 1 oz.	50 gm. or 2 oz.	100 gm. and over	
Bottles, corked, each ..	3d.	3½d.	3½d.	4d.	included
Bottles, stoppered, each ..	5d.	6d.	7½d.	9d.	included
5-gr. tubes, per 100 ..	10s. 6d.				
10-gr. tubes, per 100 ..	12s. 3d.				
15-gr. tubes, per 100 ..	14s. 6d.				

BARBITONE.—Spot values firm, business quiet. One cwt., 22s.; 28 lb., 23s.; smaller quantities, up to 26s. per lb., ex store.

BENZALDEHYDE.—Quoted by makers at from 2s. 6d. to 3s. per lb., as to quantity.

BENZOIC ACID (B.P.).—Makers quote from 1s. 10½d. to 2s. 3d. for forward delivery. An alternative source quotes from 2s. to 2s. 4½d. per lb., as to quantity.

BISMUTH SALTS.—No change in makers' prices for the following:—

	Less than 4 lb.	4 lb.	8 lb.	28 lb.	1 cwt.
Carbonate, B.P. ..	s. d. 10 10	s. d. 10 4	s. d. 9 7	s. d. 8 3	s. d. 8 0
Citrate, B.P.C. ..	13 0	12 6	11 9	10 1	9 10
Nitrate, cryst. ..	7 4	6 10	6 1	5 4	5 1
Oxide, B.P.C. ..	14 5	13 11	13 2	11 3	11 0
Oxychloride, B.P. ..	13 11	12 8	12 8	10 10	10 7
Salicylate, B.P. ..	10 9	10 3	9 6	8 3	8 0
Subgallate, B.P.C. ..	10 6	10 0	9 3	7 11	7 8
Subnitrate, B.P.C. ..	9 4	8 10	8 1	7 10	6 9

Rebate of threepence per lb. allowed on sales of not less than 2 cwt. (either for prompt delivery or on contract) provided delivery is completed within three months. Contracts subject to rise-and-fall clause.

BORAX (B.P.).—Makers' prices are steady: Granulated, £28 10s.; crystals, £29 10s.; powder, £30 per ton, in 1-cwt. bags, carriage paid in Great Britain, in minimum one-ton lots. Commercial quality, £8 per ton less.

BROMIDES.—Market firm, with makers' scales of prices unchanged. The scales are as follows: **POTASSIUM (B.P.)**, not less than 5 cwt., 2s. 2d.; 1 cwt., 2s. 3d.; 28 lb., 2s. 9d. per lb. **SODIUM (B.P.)**, not less than 5 cwt., 2s. 4½d.; 1 cwt., 2s. 5½d.; 28 lb., 3s. per lb. **AMMONIUM (B.P.C.)**, not less than 5 cwt., 2s. 5½d.; 1 cwt., 2s. 6½d.; 28 lb., 3s. 1d. per lb. Net. Rise-and-fall and re-sale clauses apply. Without engagement. Special prices for larger quantities. 28-lb. parcels and 1-cwt. cases or kegs free.

CAFFEINE.—Dutch shippers' quotations are firm at the recent advance, as follows: **PURE**, less than 56 lb., 2 dollars 55 cents; 56 lb., 2 dollars 50 cents; 1 cwt., 2 dollars 45 cents; and 2 cwt., 2 dollars 40 cents per lb. **CITRATE**, less than 56 lb., 1 dollar 63 cents; 56 lb., 1 dollar 61 cents; 1 cwt., 1 dollar 58 cents; 2 cwt., 1 dollar 56 cents, f.o.b. Amsterdam or Rotterdam. Very little **PURE** on spot and prices would not be less than 20s. per lb.

CITRIC ACID (B.P. CRYSTALS).—Makers report there is no change in their price for home consumers, which continues nominal at 1s. 2d. per lb., less 5 per cent. discount. Dealers' prices for any material available would be in the region of 1s. 8d. per lb.

CREAM OF TARTAR (B.P.).—A nominal price of 122s. per cwt., less 2½ per cent. discount, with supplies restricted to regular consumer customers, is notified by one maker.

EMETINE HYDROCHLORIDE.—Market continues firm, with makers quoting at from 95s. to 99s. per oz., as to quantity.

EPHEDRINE.—Demand for **HYDROCHLORIDE, B.P.**, continues quiet, with prices unchanged at about 11s. 6d. to 11s. 9d. per oz., and smaller parcels at up to 12s. 9d. per oz.

GALLIC ACID.—A quiet market, with prices remaining firm. Dealers quote cwt. lots at from 3s. 9d. and smaller parcels at up to 4s. 3d. per lb., ex store.

GUAIACOL CARBONATE.—Makers and dealers continue to quote at from 12s. 6d. to 13s. per lb., ex store, as to quantity.

GUAIACOL (CRYSTALS).—Makers' prices remain nominal at 10s. 9d. to 11s. 6d. per lb., as to quantity. Liquid, from 10s. 6d. upwards, as to quantity.

HEXAMINE.—Not much demand at present for free-running crystals, which are quoted at about 1s. 7½d. for bulk quantities up to 1s. 10½d. per lb. for small parcels; powder at cheaper prices.

LACTIC ACID (B.P.).—Market steady, with limited business. Quantities, in 1-cwt. carboys, 1s. 6½d. to 1s. 7½d.; in winchesters and bottles, 1s. 9d. to 2s. per lb., ex store.

MANDELIC ACID.—Makers' quotations now range from 8s. 6d. to 10s. 6d. per lb. for bulk quantities.

MERCURY IODIDES.—Makers' prices are unchanged as follows:—**RED**, less than 7 lb., 17s. 4d.; not less than 7 lb., 17s.; not less than 14 lb., 16s. 6d. **GREEN**, less than 7 lb., 19s. 4d.; not less than 7 lb., 19s.; not less than 14 lb., 18s. 6d. **YELLOW**, less than 7 lb., 20s. 10d.; not less than 7 lb., 20s. 6d.; not less than 14 lb., 20s. per lb., net, carriage paid.

METHYL SULPHONAL.—Only a small spot supply available at from 40s. to 42s. 6d. per lb., ex store.

PARALDEHYDE.—Prices for quantities on spot, in 1-cwt. carboys, steady at 1s. 3d. to 1s. 3½d.; smaller quantities, in winchesters, up to 1s. 10½d. per lb., ex store.

PHENACETIN.—No change in makers' prices for ordinary quantities, which continue at 3s. 6d. to 3s. 9d. per lb., and quotations are given without engagement. Little material is in dealers' hands, and prices are firm at about 6s. upwards per lb.

PHENAZONE.—Dealers' prices are rather dearer, and now range from 18s. for bulk quantities up to 22s. per lb. for small parcels, ex store. Only limited supplies of imported material available.

PHENOLPHTHALEIN.—Makers' prices continue firm: Less than 7 lb., 3s. 8d.; 7 lb., 3s. 7d.; 14 lb., 3s. 6d.; 28 lb., 3s. 5d.; one cwt., 3s. 4d. per lb.

PHENYLETHYLBARBITURIC ACID (B.P.).—Quotations firm, with only limited supplies available. Quoted at from 35s. to 37s. 6d. per lb., in bottles.

PHOTOGRAPHIC CHEMICALS.—Makers' prices for the following products are firm as quoted: **SODIUM HYPOSULPHITE.**—5 cwt., 19s.; 1 cwt., 22s.; 56 lb. for 12s. 6d.; 28 lb. for 6s. 6d. **SODIUM CARBONATE, RECRYST.**—5 cwt., 13s. 9d.; 1 cwt., 17s.; 56 lb., for 12s. 6d.; 28 lb. for 6s. 6d. **ALUM (PHOTOGRAPHIC QUALITY).**—1 cwt., 23s.; 28 lb. for 6s. 6d. **GLYCIN.**—7 lb., 13s. 6d.; 1-lb. bottles, 14s. 6d. **POTASSIUM FERRICYANIDE.**—Prices were recently advanced by sixpence per lb., as follows: 28 lb., 3s. 1d.; 14 lb., 3s. 3d.; 7 lb., 3s. 6d.; less than 7 lb., 3s. 9d. per lb.; 1-lb. bottles, 4s. 3d.; 8-oz. bottles, 2s. 6d.; 4-oz., 1s. 5d.; 1 oz., 10d. each. **AMIDOL**, 1 cwt., 8s. 6d.; 56 lb., 8s. 9d.; 28 lb., 9s. per lb. net; 14 lb., 9s. 9d.; 7 lb., 10s. 6d.; less than 3 lb., 12s. 6d. per lb., 2½ per cent. monthly account. Bulk parcels and tins free. 1-lb. bottles, 6d. extra. **CHLOROQUINOL.**—1-lb. bottles, 21s. per lb. **HYDROQUINONE.**—1 cwt., 6s. 4½d.; 56 lb., 6s. 7d.; 28 lb., 6s. 10d. per lb. net; 14 lb., 7s. 3d.; 7 lb., 7s. 6d.; less than 7 lb., 8s. per lb., less 2½ per cent. monthly account. Retail quantities: 16 oz., 8s. 6d.; 8 oz., 4s. 6d.; 4 oz., 2s. 8d. Trade prices in bottles: 1-lb. bottles, 8s. 6d. each; 8-oz. bottles, 4s. 6d. each; 4-oz. bottles, 2s. 8d. each; 1-oz. bottles, 1s. 1d. each, with retail selling prices 50 per cent. additional. **GOLD CHLORIDE.**—15-grain tubes, 53s. per doz. **MAGNESIUM**

POWDER.—11s. 9d. per lb. **PARAMIDOPHENOL HYDROCHLORIDE.**—9s. per lb., bottles free. **POTASSIUM METABISULPHITE.**—One cwt., 1s. 3d.; 28 lb., 1s. 6d.; 14 lb., 1s. 7d.; 7 lb., 1s. 9d.; 1 lb., 2s.; 16-oz. bottles, 2s. 6d.; 8-oz. bottles, 1s. 6d. each; 4-oz. bottles, 1s. each; 1-oz. bottles, 8d. each. **PYROGALLIC ACID, CRYST.**—1 cwt. and over, 9s.; 56 lb., 9s. 3d.; 28 lb., 9s. 6d.; 14 lb., 10s. 6d.; 7 lb., 11s.; less than 7 lb., 11s. 6d. per lb. Bulk tins free, 1-lb. tins, 4d. extra and 1-lb. bottles, 6d. extra. **PYROGALLIC ACID, RESUB.**—1 lb., 15s.; 8 oz., 8s. 3d.; 4 oz., 4s. 9d. each; 1 oz., 22s. per doz. oz. **SODIUM SULPHIDE (PURE).**—7 lb., 1s. 9d.; 1 lb., 2s. per lb., bottles free. **SODIUM SULPHITE RECRYST.**—One cwt., 23s. 6d. per cwt.; 56 lb. for 13s. 3d.; 28 lb. for 7s. **METOL.**—1 cwt., 11s.; 56 lb., 11s. 3d.; 28 lb., 11s. 6d. per lb., net 14 lb., 12s.; 7 lb., 12s. 9d.; 3 lb., 13s. 6d.; less than 3 lb., 14s. per lb., less 2½ per cent. monthly account; bulk tins free; 16-oz. bottles, 6d. each extra. Retail quantities: 16 oz., 14s. 6d.; 8 oz., 8s.; 4 oz., 4s. 3d., bottles free.

PILOCARPINE.—Makers' prices are steady as follows:—

	OZ.	4 OZ.	25 OZ.	100 OZ.
Alkaloid	21s. 6d.	21s. 0d.	20s. 6d.	20s. 0d. 0z.
Hydrochloride	16s. 6d.	16s. 0d.	15s. 6d.	15s. 0d. 0z.
Nitrate	14s. 0d.	13s. 6d.	13s. 0d.	12s. 6d. 0z.

PACKAGES	Under 5 gm. or ¼ oz.	5 gm. to 25 gm. or ¼ oz. to 1 oz.	25 gm. or 1 oz.	50 gm. or 2 oz.	100 gm. and over
	3d.	3½d.	3½d.	4d.	included
Bottles, corked, each ..	3d.	3½d.	3½d.	4d.	included
Bottles, stoppered, each ..	5d.	6d.	7½d.	9d.	included
5-gr. tubes, per 100 ..	10s. 6d.				
10-gr. tubes, per 100 ..	12s. 3d.				
15-gr. tubes, per 100 ..	14s. 0d.				

PIPERAZINE.—The price for bulk quantities would be about 75s. per lb.; small lots, in 1-oz. bottles, 5s. 6d. to 6s. per oz.

POTASSIUM PERMANGANATE.—Makers' scales of prices continue at the advance recently recorded, as follows:—

Minimum one delivery of:	B.P. Quality		Technical	
	In 1-cwt. drums	In 5-cwt. drums	In 1-cwt. drums	In 5-cwt. drums
	Per lb.	Per lb.	Per cwt.	Per cwt.
1 cwt. up	s. d. 1 5½	s. d. —	s. d. 161 6	s. d. —
3 cwt. up	1 5	—	157 0	—
5 cwt. up	1 4½	1 4½	154 6	152 0
1 ton up	1 4½	1 4½	152 0	149 6
4 tons up	1 4½	1 4	149 6	147 3

Terms: Net, delivered nearest railway station in Great Britain, drums extra and returnable.

QUININE SALTS.—Prices for these salts continue firm: **SULPHATE**, 104·90 Dutch florins; **HYDROCHLORIDE**, 131·25; **BIHYDROCHLORIDE**, 143·75; **ETHYL CARBONATE**, 134·50 per 100 oz., f.o.b. Holland. 100-oz. tins free; smaller packages extra. The limited supply of **SULPHATE** now in dealers' hands quoted at 3s. 1d. to 3s. 2d. per oz.

RESORCIN.—Prices remain unchanged at the recent advance:—Not less than 7 lb., 7s. 3d.; not less than 14 lb., 7s.; not less than 56 lb., 6s. 10d.; not less than 1 cwt., 6s. 9d. per lb. Dealers' prices for any spot material available would be in the region of 8s. 6d. to 9s. per lb.

ROCHELLE SALTS.—Makers' prices for **SODIUM** and **POTASSIUM TARTRATE, B.P.**, are at the 5s. advance recently recorded: Powder, less than one cwt., 95s.; less than five cwt., 92s. 6d.; not less than five cwt. in one delivery, 90s. per cwt.; crystals, 2s. 6d. per cwt. extra. **PULV. SEIDLITZ.** Less than one cwt., 75s. 6d.; less than five cwt., 73s. 9d.; not less than five cwt. in one delivery, 71s. 9d. per cwt. **DOUBLE SEIDLITZ**, less than one cwt., 83s. 9d.; less than five cwt., 81s. 9d.; not less than five cwt. in one delivery, 79s. 6d. per cwt., net, from fourteen days; contracts subject to rise-and-fall clause.

SACCHARIN.—The duty-paid Convention price for 550 material is firm at 98s. 4d. per lb. Business on a good scale. Neither wholesale nor retail prices are under Government control.

SALOL.—Prices are firm at from about 5s. to 5s. 6d. per lb., as to quantity.

SANTONIN.—Convention prices continue to be quoted unchanged. The scale is as follows: 15 kilo and over, £35 10s.; not less than 10 kilo, £36 5s.; not less than 5 kilo, £37; less than 5 kilo, £38 per kilo, delivered free in the U.K., 1-kilo tins free. Quotations for spot parcels are in the region of £37 to £38 per kilo.

SODIUM BARBITONE.—Current quotations continue unchanged, as follows:—One cwt. 23s.; 28 lb., 24s.; smaller quantities, 27s. per lb., ex store.

SODIUM BENZOATE (B.P.).—A fair demand is reported, with values steady. Makers' and dealers' prices are steady at 1s. 9d. for bulk quantities, up to 2s. 2d. per lb. for small parcels.

SULPHONAL.—Dealers' quantities for bulk quantities, ex stock, are now at 33s. per lb.; for small parcels, up to 35s. per lb.

TARTARIC ACID (B.P. CRYSTALS).—Makers report there is no change in their price, which continues nominal at 1s. 6½d. per lb., less 5 per cent. discount. Supplies are limited and reserved for regular consumer customers. Dealers have practically nothing to offer.

THEOBROMINE.—Dutch shippers' prices were recently advanced, but offerings are stated to be very limited. PURE; Less than 56 lb., 2 dollars 55 cents; 56 lb., 2 dollars 50 cents; 1 cwt., 2 dollars 45 cents; 2 cwt., 2 dollars 40 cents per lb. SODA SAL.: Less than 56 lb., 1 dollar 81 cents; 56 lb., 1 dollar 79 cents; 1 cwt., 1 dollar 77 cents; 2 cwt., 1 dollar 74 cents per lb., f.o.b. Amsterdam or Rotterdam.

VANILLIN.—Makers' prices are as follows: Ex clove oil or guaiacol, five cwt., 14s. 6d.; one cwt., 14s. 7½d.; 56 lb., 14s. 9d.; less than 56 lb., 15s. per lb., carriage paid in the United Kingdom.

Crude Drugs, etc.

A STEADY routine business is reported, with many commodities showing a distinctly firmer tendency. The fair volume of Continental export trade reported last week is being maintained.

AGAR.—In fair demand, with little material on spot. Kobe No. 1, 3s. 3d.; Kobe No. 2, 7s. 9d.; Yokohama No. 1, 7s. 8d. per lb., duty paid. A continued demand is reported for February–March shipment from Japan, Kobe No. 1 firmer at 6s. 2d. per lb., c.i.f. Japanese shippers' quotations for March–April are: Kobe No. 1, 6s. 3d.; Kobe No. 2, 6s.; Yokohama No. 1, 5s. 11d. per lb., c.i.f.

ALOES.—A fair business passing, values remaining firm. Spot, Curaçao, 285s. to 300s. per cwt., ex store, with no shipment offers from origin. Cape continues steady, with a limited sale; spot, 57s. 6d. to 60s.; Zanzibar, leaves, neglected; quoted at 80s. to 85s. per cwt., ex store.

ANTIMONY.—English regulus, £100 to £102 10s. Continental regulus, 93 to 95 10s. per ton, duty paid.

BALSAMS.—Market fully steady as quoted, with supplies of all descriptions short. *Tolu*, about 5s. 6d.; very soft, 5s. 3d. *Canada*, in very small supply at about 5s. 6d. *Copaiba*, Para, 3s. 6d.; *Peru*, 8s. 9d. per lb., duty paid.

BUCHU.—No change in the London market, which remains quiet and steady. New-crop rounds are offered at from 2s. 9d. to 3s. and valis at 2s. 9d. per lb., ex store. Shipment is quoted rather cheaper at about 2s. 7d. per lb., c.i.f.

CAMPHOR.—Japanese shippers recently offered small quantities of 8B commercial grade at £18 per 100 lb., c.i.f., for which there was a keen demand. No further offers are reported. Spot, tablets, 5s. 6d.; powder, afloat, 5s. 2d.; slabs, 5s. 1d. per lb., duty paid. An isolated shipment offer of slabs at 4s. 7d., c.i.f., March–April shipment. Continental synthetic, powder, 5s.; tablets, 5s. 6d. per lb., ex store. English refined flowers, one cwt., 5s. 1d.; 28 lb., 5s. 2d.; less than 28 lb., 5s. 3d. per lb. Transparent tablets, 4-oz., one cwt., 5s. 7d.; 28 lb., 5s. 8d.; less than 28 lb., 5s. 9d. per lb.

CARDAMOMS.—Supply continues short, with little business passing. Ceylon, bleached, bold, 5s.; medium pale, 3s. 9d. to 4s.; small, 3s. 6d.; Bombay seed, 4s. 6d. per lb.; Mangalore seed, 4s. 3d.; Aleppy greens, spot, 3s. 3d. to 3s. 4d.; shipment, 2s. 6d., c.i.f.

Exports from Ceylon during January–November, 1939, totalled 900 cwt., valued at Rupees 410,000, compared with 3,200 cwt., valued at Rs. 432,000, in the corresponding period of 1938.

CASCARA SAGRADA.—The steady routine trade reported last week continues. Spot, 1939 peel, up to 100s. per cwt., ex store, 1938 peel, up to 120s. 6d. per cwt., ex store. Shipment remains unchanged at about 5s. per cwt., c.i.f., in minimum car-load lots.

CASCARILLA.—Reported scarce, with spot at about 1s. 6d. per lb., ex store.

CLOVES.—The market remains quiet but steady. Zanzibar, spot, 10d. per lb.; shipment, March–April, 9½d., c.i.f. Madagascar, sellers 10½d. per lb., in bond; shipment, March–April, 9½d. per lb., c.i.f.

COCONUT (DESICCATED).—The market is steady. Spot, fine, 27s. 6d.; medium, 27s. 6d.; shipment, March, 24s. 9d., April, 25s.

Exports from Ceylon during January–November, 1939, totalled 26,000 cwt., valued at Rupees 6,008,000, compared with 552,000 cwt., valued at Rs. 4,072,000, in the corresponding period of 1938.

COD LIVER OIL.—This market remains unchanged. British-made medicinal-quality oil is reported by the producers to be available, in quantities being at 8s. per gallon, in drums, delivered, and veterinary-grade oil obtainable in drums, tins, and bottles. Norwegian medicinal oil is firm. Spot, in barrels, from 10s. 3d. to 10s. 6d. per gallon for finest medicinal. Fishing in Lofoten continues favourable, and the return up to March 9 for the whole country totals as follows:—140, 45,877 tons of cod and 23,793 hectolitres of cod liver oil; 1939, 2,517 tons, 9,700 hectolitres; 1938, 30,077 tons, 13,496 hectolitres.

DERRIS ROOT.—A fair amount of inquiry continues, but little business is passing. Holders' prices are fairly high in view of lack of shipment offers, but buyers are not attracted by current values and, with stocks limited, prices are firm. No shipment offers. Spot, 18 per cent. herb extract, 7½d. to 8d. per lb. Root of 4 to 5 per cent. rotenone content, if available, about 1s. 3d. per lb., ex store. No shipment offers.

DIGITALIS LEAVES.—Dealers' prices continue firm; very limited supply. Spot, about 120s. for ordinary quality; 190s. to 200s. per cwt. for better quality.

ERGOT.—Remains firm and short on spot. Some shipment business is reported in Portuguese at about 19s. 9d. to 20s. per lb., c.i.f. Any small amount on spot is valued at from 22s. 6d. to 24s. 6d. per lb. Hungarian, spot, about 14s., and afloat, about 13s. per lb., c.i.f.

GAMBOGE.—Spot supply short. Some odd cases of good Siam pipe quoted at about £24 per cwt., duty paid.

GINGER.—The market is reported steady at current quotations. West African, spot, 31s.; shipment, March–April, 23s. per cwt., c.i.f. Jamaican, spot, small medium, 55s. to 57s. 6d.; bold, in barrels, 90s. per cwt., ex store. Cochinchina, unwashed, 45s. to 50s. per cwt., ex store; shipment, 37s. 6d. per cwt., c.i.f.

GUM ACACIA.—Market quiet, with values unchanged. Kordofan cleaned sorts, spot, 59s.; shipment, 45s. per cwt., c.i.f.

HENNA.—Firm quotations continue for new-crop Egyptian leaves. Limited supplies are available in London: Green, 55s.; brown, 47s. 6d. per cwt., ex store.

HONEY.—All varieties still in short supply and firm as quoted. Values of Jamaican are nominal at about 95s. to 110s. per cwt., Canadian is also short and the value is now not less than 95s. per cwt., ex store. Some Australian is offered in London at 85s. to 90s. per cwt., as to grade.

HYDRASTIS.—The market remains steady and quiet, with prices unchanged. Spot, good-test root, 21s.; U.S.P., 19s. 6d., ex store; shipment, 19s. per lb., c.i.f.

IPECACUANHA.—This market remains very firm. Some business is reported in Matte Grosso at 25s. per lb., with odd bales of good-test at about 26s. to 27s. per lb. Some business is also reported in February–March shipment at 23s. per lb., c.i.f. Minas is about steady on spot at 14s. to 14s. 6d. per lb.; shipment, 11s. 6d. to 11s. 9d. per lb., c.i.f. EXT. IPECAC. LIQ., recently advanced to 32s. 6d. per lb. for minimum lots of twelve winchesters.

LAVENDER FLOWERS.—Spot, medium-blue French flowers are at about 140s. per cwt., ex store.

MENTHOL.—Very little business passing in Japanese, with spot at 20s., duty paid, and in bond at 19s. for K/S brands. Shipment offers are in the region of 23s. per lb., c.i.f., but no business is being done. Sales of Chinese material continue good, prices being at about 15s. to 15s. 6d. per lb., duty paid; shipment, March–April, 12s. 6d. to 13s. per lb., c.i.f., according to brand.

MERCURY.—The shipment quotation for Spanish-Italian metal shows no further advance at 200 American dollars per flask, f.o.b. Mediterranean port; ex warehouse, London, 207 dollars.

PEPPER.—Limited trade, with values steady. Lampong, in bond, 37½d., March–April, 3d., c.i.f. Tellicherry, spot, 5½d.; March–April, 32s. 6d. per cwt., c.i.f. Aleppy, spot, 5d.; March–April, 32s. 6d., c.i.f. White Muntok, duty paid, 5½d.; in bond, 5d.; afloat, 4½d.; March–April, 4½d. per lb., c.i.f.

PIMENTO.—Business reported quiet, with values unchanged. Spot, 10½d. per lb.; shipment, March–April, 92s. 6d. per cwt., c.i.f.

RHUBARB.—This market continues very firm, with spot supplies short. Spot, rough-round, good quality, up to 4s. 6d. per lb.; very slightly wormy, 3s. 6d. to 3s. 9d. per lb. Bold to medium Shensi held for 6s. 6d. to 7s. per lb. in cases, as to quality and seller.

RUBBER.—A fair volume of business continues, the market closing steady. Standard ribbed smoked sheet, spot 12½d.; March, 12½d.; April, 12½d.; May, 11½d.; July–September, 11½d. per lb.

Exports from Ceylon during January–November, 1939, totalled 114,575,000 lb., valued at Rupees 55,519,000, as compared with 105,650,000 lb., valued at Rs. 41,124,000, in the corresponding period of 1938.

SEEDS.—ANISE.—Spot, Syrian, 75s., duty paid; Cyprus, 75s., duty free. CANARY.—Spot, duty paid, Mazagan, 27s. 6d.; Morocco, 26s.

CARAWAY.—Spot, Dutch, 85s., duty paid. CORIANDER.—Spot, Morocco, quoted at 24s., duty paid, and 22s. 6d., in bond. March–April shipment (subject to freight being available) offered at 19s. 6d., c.i.f., for five-ton lots. CUMIN.—Spot, Cyprus, 80s., duty free; Morocco, 75s., in bond, and 80s., duty paid; shipment, from Morocco, 77s. 6d., c.i.f. DILL.—Spot, Indian, 11 per cent., 35s. 6d. FENNEL.—Spot, Indian, 52s. 6d. to 55s.; Iran, 50s. to 55s. in bond. FENUGREEK.—Spot, duty paid, Morocco quoted at 19s. ex wharf, London, and 18s. ex store, Liverpool.

MUSTARD.—English quoted in small lots at 77s. 6d.

SENEGA.—The spot market continues steady but quiet. Spot, about 4s. 6d. per lb., ex store. Shipment irregular at 4s. 3d. to 4s. 4d. per lb., c.i.f.

SENNA.—Prices unchanged from last week; a fair amount of home and export business reported. Tinnevely leaves: No. 1, 8½d.; No. 2, 5½d.; No. 3, 4½d. per lb. Tinnevely pods: Best pale hand-picked, 10d.; darker grades, 5½d.–6½d.; f.a.q., 4½d. per lb. Alexandrian pods: The market is poorly supplied with good green bold hand-picked, and prices are nominal. Manufacturing quality, 7d. per lb., ex wharf, London.

SHELLAC.—Market is quoted easier on the week: Spot, standard TN orange, 83s. 6d. to 86s. 6d.; pure button, 127s. 6d.; fine orange, 135s. to 170s. per cwt. For arrival, TN orange, 77s. per cwt., c.i.f.

TONKA BEANS.—Small business passing. Fair frosted Para beans quoted at from 2s. to 2s. 3d. per lb., as to quality and quantity, ex store. Angostura, spot, 9s. per lb.

TRAGACANTH.—Market remains quiet, with quoted values unchanged. Finest selected white ribbon, from £90; No. 1, white, £77 10s. to £80; No. 2, white, £65 to £70; No. 3, white, £55 to £57 10s.; pale leaf, £35; amber leaf, £25; red leaf, from £16 10s.; woody and hoggy, from £16 16s. All prices are per cwt., ex store, London.

TUMERIC.—Spot, Madras finger, 47s. 6d.; Rajapore, 48s.; shipment, new-crop, March-April (subject to freight being available), Madras, 34s. per cwt., c.i.f.; Rajapore, 35s. per cwt., c.i.f.

WAXES.—**BEES'** Owing to lack of stocks business is restricted, values firm: Spot, from 175s.; in bond, 160s.; shipment, Dar-es-Salaam, 160s. per cwt., c.i.f. Japanese, first three brands, spot, 120s., duty paid; shipment, 97s. 6d., c.i.f. **CARNAUBA:** Forward quotations continue at recent advances. Fatty grey, 325s.; alfloat, 300s., c.i.f.; shipment, 290s., c.i.f.; chalky grey, spot, 310s.; alfloat, 300s., c.i.f.; shipment, 280s., c.i.f. Primeira, spot, 452s.; alfloat, 410s.; shipment, 395s., c.i.f.

Essential and Expressed Oils, etc.

TRADE in these products has been moderate during the week, with few price changes to record.

ALMOND.—Business is still on the quiet side. Expressed oil, spot, cwt. lots, 3s. 8d.; smaller quantities, up to 4s. per lb., ex store. French, genuine bitter, very firm at 11s. per lb., ex store. English, distilled, 26s. to 27s. 6d. per lb.

ANISE (STAR).—Market shows a little more interest, with shipment prices reported slightly firmer. Spot, tins in cases, about 4s.; drums, 3s. 11d. per lb., ex store; shipment, March-April, tins in cases, 3s. 7½d. to 3s. 8d.; drums, 3s. 6d. to 3s. 7d. per lb., c.i.f.

AVOCADO PEAR.—Limited supply only available at about 52s. 6d. per gallon, delivered.

BAY.—Routine trade at steady figures. Quoted at from 5s. 3d. to 6s. per lb., ex store, as to quantity.

BERGAMOT.—No shipment offers for Consortium oil are yet available. Spot values remain a matter for negotiation, but about 25s. per lb., ex store, is indicated, with supplies of genuine oil stated to be limited.

BOIS DE ROSE.—Little business passing, with dealers' prices steady: Spot, from 8s. to 8s. 6d. per lb., ex store; shipment offers at about 7s. 6d. per lb., c.i.f., for distant positions.

CARAWAY.—Business in this oil remains rather on the quiet side, values steady: Dutch rectified oil continues firm at 15s. 6d. to 16s. per lb., landed and duty paid; shipment at 14s. 9d. per lb., duty paid.

CASSIA.—Very firm. Spot, leads, 5s. to 5s. 6d.; no shipment offers.

CITRONELLA.—The market for both Java and Ceylon oils remains quiet. Ceylon, spot, drums, 2s. 4d. to 2s. 6d.; small quantities up to 3s. per lb.; shipment, drums, about 2s. per lb., c.i.f. Java, spot, drums, about 2s. 6d. to 2s. 7½d.; small quantities, up to 3s. per lb.; shipment rather easier at 1s. 11d. per lb., c.i.f., but practically no business moving.

Exports from Ceylon during January–November, 1939, totalled 1,367,000 lb., valued at Rupees 1,029,000, compared with 1,472,000 lb., valued at Rs. 1,079,000, in the corresponding period of 1938.

CLOVE.—Madagascar oil continues in short supply; spot, drums, if available, 4s. 6d. per lb.; smaller parcels, up to 5s. 6d.; English distilled, firm at 7s. to 7s. 3d. per lb., as to quantity.

EUCALYPTUS.—The position of this market shows little change, with spot firm at recent figures. It is becoming increasingly difficult to obtain shipment offers. Spot, from 5s. per lb., as to holder, for 70 to 75 per cent. oil. Shippers are quoting April–May at 2s. 10d. per lb., c.i.f.

GERANIUM.—This market is steady, with only a small business passing. Bourbon of good quality firm at 15s.; shipment, nominal at 13s., c.i.f. Algerian, spot, about 15s. to 15s. 6d. per lb. Shipment, 15s. 3d. per lb., c.i.f.

LAVENDER.—Values remain steady, with little business passing. Firm at source. The limited stocks here of good 38 to 40 per cent. oil are quoted steady at from about 17s. 6d. up to 20s. per lb., ex store. LAVANDIN continues firm at 10s. 6d. per lb., ex store.

LEMON.—Some rise in price for new-crop Sicilian is reported, due to possible political developments. Quotations for shipment are at about 15s. 9d. per lb., c.i.f., for finest hand-pressed. On spot, genuine oil is mentioned at about 16s. 6d. to 17s. per lb., ex store, and blended oils are at cheaper prices. Californian oil, cold-pressed, quoted in sterling at 13s. 7½d.; at wharf; distilled; regular quality, 8s. per lb., at wharf, with demand fair.

LEMONGRASS.—The spot market remains dull at about 4s. to 4s. 2d. per lb. Shipment steadier at about 3s. 6d. per lb., c.i.f., but little business is reported.

MANDARIN.—Scarcity of spot supplies of genuine oil continues; the price would be about 25s.; shipment, firm at 23s. 6d., c.i.f.; crop reported short.

MUSK.—Limited stocks of caddies of Tonquin pods available in London held for 87s. 6d. to 90s. per oz., as to quality; shipment offers firm at 80s. per oz., c.i.f.

NUTMEG.—Little business passing, with dealers' prices steady. American, 11s. 9d. to 12s. 6d., as to quantity; shipment, slightly dearer at 10s. per lb., c.i.f. Dutch, spot, 11s. 9d. to 12s. 6d. per lb., as to quantity, ex store.

OLIVE.—The Ministry of Food controlled price paid by importers for large bulk quantities in 50-gallon drums is unchanged. Distributors'

prices for a few gallons, packed in gallon tins, carriage paid, would now range from 11s. 9d. to 12s. 6d. per gallon.

ORANGE.—Shipment of new-crop French Guinea oil steady at about 2s. 9d. per lb., c.i.f., in drums, with not much business passing. Spot is nominal at between 5s. and 5s. 6d. per lb., ex store. New-crop oil should shortly be available here. Californian oil is quoted in sterling at 4s. per lb., in small drums, ex store, duty paid, limited supplies only being available.

PALMAROSA.—Spot supplies are still limited and valued at 11s. 3d. to 11s. 6d. per lb., ex store; shipment position unchanged, the latest offers being at 9s. 9d. to 10s. per lb., c.i.f.

PATCHOULI.—Stocks on spot limited. Any genuine Singapore oil would be worth about 35s. Seychelles oil also seem scarce, with the value nominal at 27s. 6d. per lb. No shipment offers of any description.

PEPPERMINT.—A fairly good trade is reported, with the market steady. Japanese, spot, 7s. 3d. to 7s. 6d., according to brand. Latest cables from shippers quote K/S brands at 8s. 3d., and other brands at 8s. per lb., c.i.f., March–April shipment. Chinese oil is selling well, with spot at 5s. to 5s. 3d., according to brand and seller. Shipment, March–April, 4s. 9d. to 5s. per lb., c.i.f. Some oil alfloat, due shortly, is at 4s. 8d. per lb., c.i.f. American natural oil remains steady, with business of small size. Quoted at from 2 dollars 90 cents to 3 dollars 5 cents per lb., c.i.f., in tins in cases. Spot, about 16s. per lb., ex store.

PETITGRAIN.—Some odd cases reported offered on spot at 10s. per lb., ex store. Shipment, March–April, drums only, offered at 7s. 6d. per lb., c.i.f.

ROSE.—The spot value for small quantities of genuine Bulgarian, delivered, is now about 45s. per oz. Shipment remains about £65 per kilo, c.i.f.

ROSEMARY.—The spot value of Spanish oil is now in the region of 3s. 6d. to 3s. 9d. per lb., ex store.

SPIKE.—Little business passing in this oil. Good-quality Spanish is available at about 7s. 6d. to 8s. per lb., ex store. Other grades are at lower figures.

TI-TREE.—Spot supplies continue to be offered by importers at about 52s. 6d. per gall., in tins.

TURPENTINE (AMERICAN).—Values are steady: London, 54s. 9d. per cwt., tax paid, in barrels, ex wharf; Liverpool, 61s., in barrels, ex store.

VETIVERT.—Spot is quoted at about 24s. per lb., with limited supplies only available. Java, spot, 21s. to 22s. per lb., ex store.

WORMSEED.—Continues firm both spot and forward, with supplies severely restricted. Spot 21s. 6d.; shipment, 20s. 3d. per lb., c.i.f.

Synthetics.—The following are the current prices:—**AMYL ACETATE**, pure, 105s. per cwt., technical, 100s. per cwt. **AMYL SALICYLATE**, 3s. 3d. to 3s. 9d. per lb. **AUBEPINE**, ex para cresol, 15s. per lb., nominal; ex anethol, 16s. to 17s. per lb. **BENZALDEHYDE**, about 2s. 9d. to 3s. 6d. per lb. **BENZYL ACETATE**, 2s. 3d. to 2s. 9d. per lb. **BENZYL ALCOHOL**, 2s. 6d. to 3s. 6d. per lb. **BROMSTYROL**, 100 per cent., nominal 17s. per lb. **CITRAL**, chemically pure, about 10s. to 12s. per lb. for good quality. **COUMARIN**, English makers quote nominal at about 13s. 6d.; imported material, up to 20s. per lb. or more. **ETHYL PHTHALATE**, about 1s. 6d. per lb. for cwt. lots and up to 2s. 6d. for smaller quantities. **EUGENOL**, 9s. to 11s. per lb. **GERANIOL**, ex palmarosa, 18s. to 20s. per lb. **HELIOTROPIN**, 100 per cent. crystals, quoted nominal at 18s. per lb. **ISO-EUGENOL**, 11s. to 12s. per lb. **METHYL ANTHRANILATE**, nominal, 16s. per lb. **MIRBANE**, cwt. lots at 9d. per lb.; small quantities at higher prices. **MUSK KETONE**, price now 20s. per lb. **MUSK XYLOL**, 7s. to 8s. per lb. **MUSK AMBRETTE**, 17s. to 18s. per lb. **PHENYL ETHYL ALCOHOL**, nominal, 12s. 6d. per lb. **SAFROL**, pure, 6s. to 6s. 6d. per lb. **TERPINEOL**, nominal, 2s. to 2s. 6d. per lb.

WORLD MINERAL INDUSTRIES

No. 9—Cobalt

THE following details of world production of cobalt are taken from the statistical summary, 1936–38, of the mineral industry of the British Empire and foreign countries, issued by the Imperial Institute, London, S.W.7 (H.M. Stationery Office, price 7s. 6d.). The figures are in cwt.

Producing Country	1936	1937	1938
BRITISH EMPIRE:—			
Northern Rhodesia	9,078	17,499	28,762
Canada (c)	7,925	4,527	4,100
Burma (b)	5,910	5,475	4,034
FOREIGN COUNTRIES:—			
Belgian Congo	13,480	(d) 30,000	(d) 26,000
French Morocco (estimated)	7,700	10,900	13,500
Mexico	—	—	17
Bolivia	—	6	(a)

Complex ores containing cobalt are produced in Finland, Germany, Greece, Japan and China, but figures of cobalt content are not available.

(a) Information not available. (b) Estimated cobalt content of nickel-spess exported to Hamburg. (c) Metal recovered from smelter products plus cobalt contained in cobalt residues exported. (d) Estimated.

COMMERCIAL NOTES

Italian Lemon Oil Exports.—Shipments to the chief destinations from 1936 to 1938 and during January–July 1939 were as follows:—

Destination	1936		1937		1938		1939 (7 months)	
	kilos	1,000 lire	kilos	1,000 lire	kilos	1,000 lire	kilos	1,000 lire
ance ..	27,570	12,358	44,549	4,593	41,253	4,479	27,602	2,495
rmany ..	45,754	2,069	40,776	4,526	48,390	5,047	28,089	2,174
eat Britain ..	34,476	2,442	91,706	9,428	113,989	11,109	145,807	11,946
etherlands ..	7,176	377	16,038	1,567	16,604	1,669	16,640	1,378
ited States ..	98,216	4,428	43,717	4,651	34,788	3,721	42,442	3,282
ustralia ..	8,851	489	9,751	941	9,435	911	11,606	925
lian possessions	—	—	—	—	768	76	606	51
tal ..	244,586	12,358	270,526	28,433	288,740	29,439	291,235	23,781

U.S.A. Peppermint Oil Industry.—The total output of peppermint oil (including a limited quantity of spearmint) in the states of Indiana, Michigan, Ohio, Oregon and Washington during the year 1939 was estimated to reach 845,000 lb., compared with 890,000 lb. in 1938, and an average during 1929–1937 of 872,000 lb., according to figures of the Department of Agriculture, Washington. The decline in the last year's output was due to damage from frosts and wet weather in the Michigan growing-area early in the season, which brought the indicated output of that State to 429,000 lb. from a yield of 551,000 lb. of oil in 1938. In all other areas, indications point to a larger output, the yield in Indiana increasing from 225,000 to 285,000 lb., in Oregon from 77,000 to 84,000 lb., and in Washington from 29,000 to 39,000 lb. The indicated yield in Ohio was 8,000 lb., as in 1938. Peppermint oil production in the United States has been in excess of domestic requirements, giving a substantial excess available for export. From 1929 to 1937, inclusive, an average of 277,000 lb. per annum was exported, which is approximately 30 per cent. of the total output during that period. The United Kingdom was the largest export market for peppermint oil in 1938, taking a total of 197,823 lb.; followed by Germany, 175 lb.; Canada, 27,870 lb.; France, 27,245 lb., and the Netherlands, 10,022 lb. In 1938 and 1939, however, considerable quantities were exported into the United States, as shown by the following table:—

Country of Shipment	1938		1939	
	lb.	\$	lb.	\$
gium ..	63	368	—	—
rmany ..	125	168	—	—
etherlands ..	113	131	122	142
ssia ..	4,452	5,858	49,191	71,215
ted Kingdom ..	696	5,874	2,562	10,873
an ..	17	23	15	34
y ..	—	—	14	55
na ..	—	—	60	21
Total ..	5,466	12,422	51,964	82,340

Canadian Soap Exports.—Exports of soaps from Canada in October, 1939, amounted to 63,380 lb. valued at \$7,762, against 1,230,983 lb., valued at \$120,097, in the corresponding month of 1938, according to the Dominion Bureau of Statistics. Of the total amount exported in October, 1939, toiletary grades accounted for 57,980 lb. In recent years Canada's exports of soaps have been expanding steadily. In 1938 exports aggregated 15,345,400 lb., valued at \$1,419,000, and during 1937 14,508,000 lb., valued at \$1,257,000. More than 95 per cent. of the soaps exported from Canada consist of toilet grades, and practically the entire amount goes to areas of the British Empire, particularly the United Kingdom.

Japanese Peppermint Oil Exports.—Shipments during the years ended June 30, 1938 and 1939, showing destinations, were as follows:—

Destination	1937–38		1938–39	
	lb.	lb.	lb.	lb.
na ..	—	1,800	—	—
ish India ..	14,000	16,900	—	—
its Settlements ..	26,900	300	—	—
ch Indo-China ..	3,400	4,200	—	—
ch Britain ..	53,300	80,200	—	—
nce ..	272,300	167,700	—	—
nany ..	374,300	348,600	—	—
ustralia ..	5,200	2,500	—	—
er countries ..	70,300	53,900	—	—
Total ..	819,700	676,100	—	—

Tomato Juice.—Interest is being taken in Kenya in the production of tomato juice. A memorandum has been compiled by the Imperial Institute giving an account of:—Varieties of tomatoes grown for juice production; commercial methods of extraction; types of apparatus employed; and canning methods. A list of selected literature on the subject has also been transmitted.

Passion Fruit Juice.—Preliminary investigations have been undertaken in collaboration with a firm of chemical engineers to explore the possibilities of exporting concentrated passion-fruit juice from Kenya.

Chilean Quillaia Bark.—The yield of bark obtained from the tree *Quillaia saponaria* was reported to have been smaller in 1939 due to rainy weather. Stocks are reported to be relatively low. The tree from which bark is obtained grows wild in Chile on mountain sides at elevations of 2,000 feet or more in the district bounded roughly by Coquimbo on the north and Concepcion on the south. While no effort has been made to cultivate the tree in Chile, to conserve the supply, stripping can be legally done only between September 15 and November 15 of each year, and, to insure proper grading, shipments are controlled by the Export Control Service. In recent years exports (in metric tons) have been as follows: 1931, 1,671; 1932, 2,976; 1933, 2,277; 1934, 2,275; 1935, 2,383; 1936, 2,511; 1937, 2,531, and 1938, 1,811.

French Vanillin Exports.—Exports and imports of vanillin during recent years and January–July 1939 were as follows:—

Year	Exports		Imports	
	Metric quintals	1,000 francs	Metric quintals	1,000 francs
1930 ..	773	6,200	39	429
1931 ..	484	3,509	35	481
1932 ..	603	4,098	40	525
1933 ..	852	7,370	28	343
1934 ..	913	7,263	19	215
1935 ..	1,091	6,845	12	144
1936 ..	1,040	6,240	22	237
1937 ..	1,276	11,312	7	150
1938 ..	1,302	13,861	14	223
1938 (7 months)	566	6,060	8	140
1939 (7 months)	566	4,871	5	100

Dutch East Indies Vetiver Oil Industry.—The production of a grass known locally as "akar-wangi" (*Vetiveria zizanioides*, Stapf), from which vetiver oil is obtained, is increasing steadily in the Netherlands Indies. With the opening of the new Herb's Laboratory at Garoet in the near future the industry is expected to expand further. In 1927 the area planted with grass amounted to 88 acres; by 1937 it had increased to 1,140 acres. During this period of development the crop was exported in the form of roots, but of late, in order to effect savings in freight, oil is being extracted locally. The yield in oil runs from 1 to 2 per cent. Several years ago, two or three local essential-oil distilleries began processing vetiver oil, but their efforts did not meet with success. Later, however, with improved facilities, local distillers were able to produce a product satisfactory to European and American markets, and in 1937 a total of 20,000 kilos of oil valued at 11,827 dollars were exported, 2,000 kilos going to the Netherlands, and the remainder to France, British India, Japan and the United States. United States of America imports of vetiver oil from Netherlands Indies in 1937 aggregated 11,651 lb., valued at 37,020 dollars, and in 1938 receipts from that country amounted to 1,745 lb., valued at 5,000 dollars.

Indian Camphor Imports.—During the year April 1, 1938, to March 31, 1939, imports of camphor into India totalled 1,868,694 lb. (value, Rupees 2,188,036) compared with 1,771,471 lb. (Rs. 2,233,243) during the preceding twelve months. The principal supplying countries in 1938–39 were Germany (626,221 lb.), Japan (1,015,131 lb.) and "other countries" (227,342 lb.). Imports during previous years are shown in the following table:—

Country of Origin	1936–37		1937–38	
	lb.	Rupees	lb.	Rupees
Burma ..	—	—	21,085	28,295
Straits Settlements ..	—	—	81	97
Hong Kong ..	4,843	6,058	312	292
Other British Possessions ..	333	725	622	1,298
Germany ..	645,034	712,575	717,354	860,752
Italy ..	235,000	268,040	220,100	264,398
Japan ..	981,412	1,136,301	811,523	1,077,451
Other foreign countries ..	1,389	1,157	394	660
Total ..	1,868,011	2,124,856	1,771,471	2,233,243

Spanish Industrial Chemical Syndicate.—The stimulation and the protection of the Spanish domestic chemical manufacturing industry is seen in the recent creation of the "Servicio Sindical Nacional de Industrias Químicas" (National Syndicate Service of Chemical Industries). At present, according to reports, the combined Spanish industries which fall under the new syndicate provide employment for some 10,000 workmen, and have an annual production valued at approximately 500,000,000 pesetas (about £12,500,000). It is understood that the new organisation will create a research committee, which will promote the manufacture of new products within the country and encourage the utilisation of raw materials now available in Spain as well as the production of many products imported from overseas sources. In addition, the Syndicate, like other industrial bodies of this type in Spain, will be a regulatory and protective agency through which imports will be at least partially controlled.

CORRESPONDENCE

Correspondents may adopt an assumed name, but must in all cases furnish their real name and address to the Editor

Subdividing Powders

SIR,—The paper given at Edinburgh on dispensing-balance weighings (*C. & D.*, March 9, p. 181) should be read by all dispensing chemists. The weighings that were carried out to determine the possibility of subdividing a weighed quantity of powdered substance into twelve equal powders showed that for practical purposes the difference was not sufficient to affect the patient. It might be interesting to see the results of a similar series of weighings of compound powders, that is to say, powders with three or four ingredients that needed to be weighed separately before mixing and subdividing into the required number of doses, in order to find out whether the primary weighings had any relation to the accuracy of the final portions. A way of subdividing powders that one hesitates to mention is by flattening the powder in the shape of a square on a piece of white demy and dividing with a powder knife. I have seen this done with such accuracy that subsequent weighing showed no appreciable difference between the powders.—Yours faithfully,

DUODECIMA (11/3)

Phenol Ointment

SIR,—Phenol ointment (see *C. & D.*, March 9, p. 180) has never been a satisfactory product. In the making care must be taken to prevent undue loss. If kept in the usual ointment jar the preparation is liable to become discoloured, crystals of phenol collect on the sides of the jar, and the base becomes hard. It is therefore difficult to see why, considering the infrequent demand, this ointment should be retained in the British Pharmacopœia. On the other hand, so long as it is an article offered for sale somebody might attempt, if it were not official, to set up a standard, and the chemist would be faced with the problem of defence. In the case reported the prosecution failed, and it is difficult to see why actions should continue to be brought concerning such obviously unsatisfactory products. When one reflects on the amount of time and trouble taken to prepare these prosecutions, one cannot help thinking that some of the energy expended in summoning chemists might well be diverted to taking samples from general shops, where one sees such objectionable merchandise as cards of formalin lozenges all dusty and fly-blown.

Yours faithfully,

PHENOLIS (12/3)

Ever-changing Pharmacy

SIR,—Your illuminating editorial on medical research (*C. & D.*, March 2, p. 169) animadvert to the progress achieved and unveils some of the results of laboratory enterprise in respect of their practical application. Yet while the realisation of these stupendous, indeed interminable, tasks must stimulate our admiration, the fact is borne upon us that pharmacy and physic are destined more widely to diverge. This severance of professional interests, though we might safely presage the event to be less a defended divorce than an injudicious separation, is without prejudice to the chemist's continued custody of his customers. The chemist will ever remain a friend and adviser, but if the pharmacist's strictly ethical practice annually declines he must replenish his exchequer with the revenue derived from commerce. A mass of merchandise, a multitude of medicaments puffed by ubiquitous publicity, occupy the shelves once resplendent with the repositories of galenicals. Dispensing diminishes, with inevitable recourse to more trade. The vicious cycle is established and the process, professionally, is pernicious, persistent and permanent. Thus does the character of our calling adversely develop. Lack of unity in the phalanx of pharmacy imperils such few advantages as remain to the oldest profession. Parliament, the protector of corporations and other chartered institutions, has ever turned an unsympathetic ear to the claims of pharmacy. The materials of medication rapidly change. Ampoules, injections and a multitude of manipulative methods supplant the mixture once supreme in the armamentarium of medicine. Thus, reluctantly, we must acknowledge the trend of a new and monumental reform which neither sentiment should seek to decry nor self-interest to defeat. The rapidity of this reformation assumes the aspect of a revolution and we must rotate in its orbit. When new conditions are established, he who is now a neophyte among us may, with pardonable pride, contemplate his emancipation with academic equanimity and reflect upon his enhanced status with satisfaction.—Yours truly,

DRUMCONDA (3/3)

MISCELLANEOUS INQUIRIES

We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them

Furniture Polish.—*M.C.* (1/3).—The following will probably be a suitable alternative to those you refer to:—

Linseed oil, boiled	550 c.c.
Completely denatured alcohol	138 c.c.
Oil of turpentine	138 c.c.
Solution of antimony chloride	36 c.c.
Diluted acetic acid	138 c.c.

Mix, adding the solution of antimony chloride last.

Zinc Dental Cements.—*O. & S.* (5/3).—The following will provide you with an alternative method of making this type of preparation. Concentrate pure phosphoric acid until semi-solid and mix aluminium phosphate with it with the aid of heat. For use, mix with zinc oxide to the consistency of putty. This cement sets fairly quickly, but not so rapidly as those to which you have referred.

Deek's Ointment.—*P.C.* (8/3).—This is used in the treatment of pruritus ani and has the following formula:—

Acid. salicyl.	4
Bismuth. subnit.	10
Hydrarg. salicyl.	4
Ol. eucalypt.	4
Paraff. moll.	
Adeps lanæ hydros.	aa pt. æq. ad 100

Colouring Billiard Balls.—*J. W. & S.* (5/3).—These should first be treated by washing in warm sodium carbonate solution ($\frac{1}{2}$ oz. to a pint). They should then be rinsed and immersed in about 5 per cent. nitric acid for twenty minutes and finally washed with cold water. The following are the dye solutions to be used. (1) Alcoholic solution of fuchsin, 1 in 20. The ball should be allowed to remain in the solution until it acquires the desired colour. (2) Immerse the ball for a few minutes in 2 per cent. solution of tin chloride, then boil in a solution of logwood. Remove the ball and immerse in a solution of potassium carbonate until it assumes the desired colour. (3) Immerse the ball in a solution consisting of carmine, 3 grains, sufficient ammonia to affect solution, and water to 1 oz.

Cough Linctus.—*L. N.* (4/3).—The following, taken from "Pharmaceutical Formulas," Vol. II, may be of assistance to you:—

I	
Ol. menthæ pip.	℥ xv.
Ol. anisi	℥ xx.
Spt. camphoræ	℥ ij.
Oxymel. scillæ	℥ iv.
Syr. toluat., tussil., et marrub., et tr.	
ipecac.	aa.
Tr. seneg. et ext. glycyrr. liq.	aa.
Syr. scillæ	ad ℥ xx.

Dose: Fifteen drops to ℥ ij.

II	
Ext. ipecac. liq.	℥ ij.
Tr. opii camph.	℥ vj.
Tr. pruni Virg.	℥ j.
Theriacæ	℥ viij.
Glycerini	℥ vj.
Ext. glycyrrh. liq.	℥ iv.
Acid. sulph. pur.	℥ 100.
Inf. lini	ad Oij.

Dose: Two teaspoonfuls.

Oiticica Oil.—*S. C. C.* (22/2).—This oil, also known as oil of licania, is obtained from the seeds of *Licania rigida*, N.O. *Rosaceæ*, a large tree of Northern Brazil. The seeds yield about 60 per cent. of an oil which first attracted commercial attention in 1934. Most important studies of the constitution of this oil are those of Brown and Farmer ("Biochemical Journal," 1931, p. 631). The oil consists largely of glycerides of a ketonic fatty acid, licanic acid. The refractive index of the oil at 25°C. 1.504 to 1.518; saponification value 185 to 203; iodine number 218; specific gravity 0.9440 to 0.9858. The oil appears on the market as a creamy-white semi-solid which melts at about 40°C. When heated to 225°C. for thirty minutes, it forms a permanently liquid oil. The oil has many of the valuable properties, especially the drying quality, of tung oil, and is being largely used as a substitute for that oil, because of its comparatively low price.

HOWARDS' QUINISAN

TABLETS

WELL ADVERTISED
VERY PROFITABLE

and

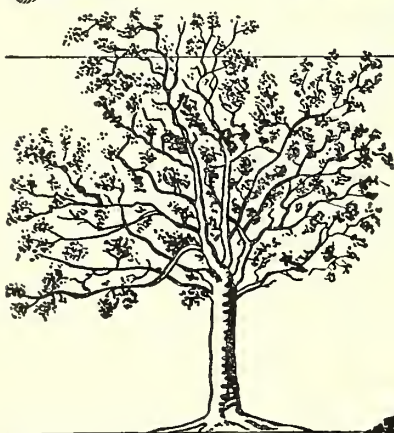
REALLY WILL STOP COLDS
and FLU IN 24 HOURS

P.A.T.A.

Selling Agents: FASSETT & JOHNSON, LTD., Clerkenwell Road, London, E.C.1

Made by

HOWARDS OF ILFORD

GENUINE EAST INDIAN SANDALWOOD OIL

This Sandalwood Oil is obtained from the Sandalwood tree which grows almost exclusively in the State of Mysore—it is produced under expert Government supervision and is guaranteed to contain not less than 90% Santalol. It is invaluable as a basic, modifier and fixative for all perfumes and its therapeutic value is unrivalled.

MYSORE
Sandalwood Oil

Sole Agents for U.S.A.:
Messrs. W. J. Bush & Co. Inc., 11 East
38th Street, New York.

Sole Agents for Canada:
Messrs. W. J. Bush & Co. (Canada) Ltd.,
432 St. Helen Street, Montreal

Sole Agents for South & Central America:
Messrs. W. J. Bush & Co. Ltd. (London)

THE TRADE COMMISSIONER FOR MYSORE IN LONDON
 Grand Buildings, Trafalgar Square, London, W.C.2 Telephone: WHItchall 8888

SOLAZZI
 LIQUORICE JUICE

IS NOW AVAILABLE IN

PELLETS

IN CONVENIENT 1oz PACKETS

EPSOM SALTS

Commercial and B.P. Qualities
also Powdered

Glauber's Salt

Commercial and B.P. Qualities
and Desiccated

Zinc Sulphate

Commercial and B.P. Qualities

Zinc Chloride

Fused, Granulated and Liquid

**WILLIAM
 BLYTHE
 & CO., LTD.**

Holland Bank Chemical Works

**CHURCH
 LANCASHIRE**

**Hyposulphite
 of Soda**

Pea Crystals

Lead Arsenate

Paste and Powder

**Precipitated
 Sulphur
 WEED KILLER**

A list of our general Technical
Chemicals sent on application

Announcement

ASTHMOLYSIN

and

POSTERISAN

are now

MANUFACTURED IN ENGLAND

in conformity with the original formulae

PACKING AND PRICES REMAIN UNCHANGED

ORDER FROM YOUR WHOLESALE

Issued only by

CHAS. ZIMMERMAN & CO., LTD.

Medical Department

9-10 ST. MARY-AT-HILL, LONDON, E.C.3

Telegrams:

Acidolan, Bilgate, London

Telephone:

MANsion House 6005-6-7-8

In unskilled hands !

The value in emergency of a reliable germicide which can be used quickly without danger or discomfort, makes 'Dettol' more than ever today the antiseptic for everybody's use.

Its high germicidal efficiency and its gentle action upon tissue, permits safe, rapid healing. These properties have won for 'Dettol' a trusted place — not only in the surgical and maternity wards of great hospitals — but wherever prompt aid and protection against infection may be needed.

'DETTOL'

TRADE MARK

THE MODERN ANTISEPTIC

RECKITT AND SONS, HULL AND LONDON. (PHARMACEUTICAL DEPT. HULL)



'Dettol' is packed in attractive bottles. It sells at a reasonable price. 4 oz. size 1/-, 8 oz. size 1/9, 16 oz. size 3/-. Larger sizes for Medical and Hospital use.

HOWARD LLOYD & Co., Ltd.

Manufacturing Chemists

LEICESTER (Est. 1884)

'PHONE : LEICESTER 5423



Consult us for your
WAR TIME
REQUIREMENTS

PILLS • TABLETS • CAPSULES

SPECIALISTS
in the manufacture
of these goods over
a period of 50 years

GUMS

Acacia
Tragacanth
Karaya
Benzoin
Copal
Mastic
Damar

SHELLACS

and

WAXES

Japan Wax, White
Bees Wax, Candelilla
Wax, Carnauba Wax

Official Agents :

ANGELO BROS. LTD
SHELLACS

In natural
and powder
form

A.F. SUTER & CO. LTD

133 FENCHURCH ST., LONDON, E.C.3

Phones, Mansion House 0347 (2 lines). Grams, Suterresin, Fen, London

A.R.P.

"TANNOL"

TRADE MARK

BRAND

for Home Treatment of Burns and Scalds

'TANNOL' is the most successful home treatment for burns of any description. Its action is to—

1. Relieve pain quickly.
2. Prevent infection.
3. Assist rapid healing.

'TANNOL' makes the latest hospital practice for treating burns and scalds practicable for home use. It provides the healing and non-scarring characteristics of Tannic Acid in combination with the antiseptic



REGD TRADE MARK

properties of a stable Acriflavine Emulsion. 'TANNOL' has proved most effective for general first-aid use and is obviously an invaluable part of every home A.R.P. kit. It will keep indefinitely, always ready for instant use.

'TANNOL' can be recommended with confidence. An attractive 2-colour show-card is supplied with all orders.

PRICES 1/6 and 2/6

Trade Prices—12/- & 20/- per doz.

CLAY & ABRAHAM LTD. + Manufacturing Chemists + LIVERPOOL

London Agents: **THOMAS & LINTON LTD., 4 Gray's Inn Road, London, W.C.1**

Also from your usual wholesaler

C.T.117

Doing great Service

AT HOME AND ABROAD

Demand reaches new Record

During the past few months there has been ample evidence of the appreciation of Cephos as a safe and effective treatment for Influenza and Colds. Many letters to this effect have been received, both from this country and from those serving with the B.E.F. Extensive Cephos advertising will continue to keep this valuable Harley Street prescription in the public eye and a brisk demand during the ensuing months may be confidently expected. Retail in tablet or powder form, 1s. 3d. and 3s. Single Doses, 2d. each. Terms to the Trade remain unchanged.

Cephos
See-foss REGD
Pronounced THE
PHYSICIANS' REMEDY

The prescription you may recommend with every confidence in cases of

**COLD, INFLUENZA, HEADACHE
NEURALGIA and for RHEUMATISM**

Cephos Ltd., Blackburn

THE P.A.T.A. YEAR BOOK AND PROTECTED LIST FOR 1940

now being distributed includes the products of nearly 400 manufacturers. On all these proprietaries protected by the P.A.T.A., the retailer is assured of a fair and guaranteed profit. P.A.T.A. minimum retail prices are enforced, and the allowance of dividend rebate or bonus is prohibited.

If you are not sure that a line is "on the P.A.T.A.," refer to this List, and if it is not there, ask the maker the reason why!

**CONSULT THE PROTECTED LIST AND
SUPPORT THOSE MANUFACTURERS**

who protect prices and profits through
the P.A.T.A.

**THE PROPRIETARY ARTICLES
TRADE ASSOCIATION**

43 Gordon Square, LONDON, W.C.1

Advance in price of

ROBINSON'S BARLEY CRYSTALS

Owing to substantial increases in the cost of materials we are reluctantly obliged to advance the price of Robinson's Barley Crystals to 8½d. and withdraw the 2d. size. We shall be pleased to send full details on application.

KEEN, ROBINSON & CO., LTD., NORWICH

*The
W-I-D-E-S-T
market of
all tonics*



● All classes value **Phosferine**. It is everyone's Tonic. The incalculable benefits to be derived from a course of Phosferine are known all over the world. Continuous advertising is constantly creating new demands and renewing old-standing custom. Today, when the benefits of Phosferine are being appreciated to a greater extent than ever, this helpful publicity is bringing you the business which rebuilds real Goodwill.

Keep up your stocks—tablets and liquid—and keep up your profits.

PHOSFERINE

THE GREATEST OF ALL TONICS

Phosferine (Ashton & Parsons) Ltd., Phosferine Laboratories, King George's Avenue, Watford, Herts.



Portrait of Youth

Wherever loveliness is on view . . . men will stop and admire. But women will wonder from what beauty salon that radiance came, to what expensive cosmetics that complexion owes its charm. And they may envy . . . but there is no need. Beauty still depends on good cosmetics, but good cosmetics cost you little when you use Snowfire. The Snowfire Aids to Beauty give glamour to hair, skin and hands — that's the beauty of Snowfire!

* **Snowfire Vanishing Cream**, the perfect powder base and complexion beautifier. 1/3 the jar. Small jars and tubes 6d.

* **Snowfire Powder**, for day-long loveliness. In Naturelle, Peach, Rachelle, Deep Rachelle and Golden Peach shades. 6d.

* **Snowfire Rouge**, gives cheeks a lovely, natural glow. Blonde, Brunette, Rose-Brunette and Tangerine shades. 6d.

Other Snowfire Aids to Beauty are Lipsticks, Eye Cosmetic, Skin Lotions and Creams, Shampoos and Tinted Wave Set.

Snowfire

AIDS TO BEAUTY

This is a reproduction of one of the very effective advertisements for Snowfire products now appearing in the National Press

It pays to display **EUCRYL**

**SHOWCARDS & DISPLAY MATERIAL
SENT ON REQUEST**



EUCRYL DENTIFRICES

**TOOTH POWDER · TOOTH PASTE · DENTURE POWDER
DENTAL PLATE FIXATIVE**

**PROFIT ON
SELLING
PRICE**

39%

**PROFIT ON
BUYING
PRICE**

63·6%

EUCRYL LTD. Manufacturing Chemists, SOUTHAMPTON

*The All-British
Dentifrices
with BIG
PROFITS*

*Nationally
Advertised
all the
Year Round*

IMPORTANT!

A LETTER TO PHARMACISTS

Dear Sir,

We take this opportunity of thanking our numerous friends for their support and consideration during the past rather difficult year, and of wishing them more prosperity and less worry in 1940.

We are very pleased to say that we have secured good supplies of the special paper used for Papier Poudré and the price of the books will not be raised for the present, but the costs of binding and printing are advancing rapidly and as we cannot guarantee the present prices indefinitely, it is therefore advisable to look up your stocks and order any shades required from your wholesaler or direct from us.

Don't forget that busy women engaged in home defence will appreciate this handy and hygienic beautifier. It takes no room in the pocket (they have them now) or the bag. But you must show the book to sell it.

Try one on your counter for a week or two and prove this. Show stands and cards free on request.

Yours very truly,

PAPIER POUDRÉ, LTD.



Managing Director.

Prices

4d. size	2s. 8d. doz.	} 2½ per cent. 30 days.
8d. „	5s. 4d. „	
1s. 4d. „	10s. 8d. „	
6 doz. 8d. or equivalent in other sizes. 7½ per cent.		

From all wholesalers or direct from:

PAPIER POUDRÉ, Ltd., 45 Fouberts Place, Regent St., W.I.

We are also sole manufacturers of: **SANDAL CEDAR MOTH BAGS. COTTAGE GARDEN POT POURRI SACHETS. PERFUMES. POWDERS. Etc.**



SAVILLE'S

FAMOUS EASTER BONUS MAINTAINED FOR 1940 AT PRE-WAR PRICES

Yes! It's true. Saville have determined to maintain their famous Easter Bonus Offers, and at pre-war prices, too. Below you will find the special Bonus Offers set out in full. They provide an unique opportunity to stock up with these best-selling lines on terms which give you a great deal of extra profit. But the offers definitely close on

Saturday, March 30. To delay ordering these goods, therefore, is simply throwing money away. Get your Spring and Summer requirements NOW, at these special rates, display Saville lines prominently — and public demand, increased by National Advertising, will do the rest. Everything is set for a bumper Saville season!

ORDER YOUR SPRING STOCKS OF 'SEVENTH HEAVEN', 'MISCHIEF' AND 'JUNE' ON BONUS TERMS — NOW! ★

YOUR SPECIAL BONUS OFFERS

OFFER No. 1.

ORDERS VALUE £3

assorted to customer's own selection in SEVENTH HEAVEN, JUNE or MISCHIEF Perfume will receive Bonus of 4 x 1/3 size JUNE or MISCHIEF PERFUME FREE and 1 extra 1/3 size JUNE or MISCHIEF Perfume free for each unit of 15/- over £3 up to £5.

DISCOUNTS. 5% discount will be allowed for 14 day's Window Display and a further 5% for cash with order (if desired).

OFFER No. 2.

ORDERS VALUE £5

assorted to customer's own selection in SEVENTH HEAVEN JUNE or MISCHIEF Perfume will receive Bonus of 8 x 1/3 size JUNE or MISCHIEF PERFUME FREE and 1 extra 1/3 size JUNE or MISCHIEF Perfume free for each unit of 12/6 over £5 up to £10.

DISCOUNTS. 5% discount will be allowed for 14 day's Window Display and a further 5% for cash with order (if desired).

OFFER No. 3.

ORDERS VALUE £10

assorted to customer's own selection in SEVENTH HEAVEN JUNE or MISCHIEF Perfume will receive Bonus of 20 x 1/3 size JUNE or MISCHIEF PERFUME FREE and 1 extra 1/3 size JUNE or MISCHIEF Perfume free for each unit of 10/- in excess of £10.

DISCOUNTS. 5% discount will be allowed for 14 day's Window Display and a further 5% for cash with order (if desired).



**DO IT NOW!
OFFER CLOSES
DEFINITELY
ON MARCH 30**



Even the onset of war could not prevent the instant triumph of **"SEVENTH HEAVEN"**. Its unusual fragrance, gay and sophisticated pack and intriguing name sent it instantly soaring to success which is still increasing every day.

"SEVENTH HEAVEN" IS BEING ADVERTISED NATIONALLY IN THE FOLLOWING PAPERS:-

Daily Mirror	Illustrated
Daily Sketch	Woman
Glasgow Bulletin	Woman & Beauty
Picture Post	Woman's Fair
Everywoman	

A READERSHIP OF WELL OVER SIX AND A QUARTER MILLION

You are **SAFE** in stocking all Saville Perfumes. They do sell.. and will go on selling.. no matter what emergencies arise. You already have **PROOF** of Saville's vigorous and courageous war-time policy. Easter Bonus maintained! New and smarter packings! Advertising not merely maintained but increased! Display Material free! Window and counter displays of all three Saville Perfumes will bring you valuable additional business.

"SEVENTH HEAVEN" ADVERTISING NOW APPEARING

"JUNE" & "MISCHIEF" ADVERTISING SHORTLY TO COMMENCE

SAVILLE PERFUMERY LTD. · WATFORD · HERTFORDSHIRE



NOW DE LUXE PACKINGS FOR ALL THREE 1/3 SIZES!

We were the first to pack a trial-size perfume at a low price in individual cartons, as against the loose pack in dozen boxes. So great was the success in the case of our sensational new perfume, "Seventh Heaven", that we are now extending this to "June" and "Mischief". Smart new miniature showcards are available to tell the public of these elegant new miniature packings.



**Greater demand for
Larola . . . are you ready?**

- ★ Since the War, Larola, as in 1914, has not only maintained but strengthened its enviable position both at home and abroad as the most successful seller for the hands and complexion.
- ★ Sales, already above normal, are still soaring. Larola is the original of its kind . . . absolutely pure . . . free from pore-clogging ingredients, and women demand it.
- ★ Advertisements, read by millions of women each year, are being fully maintained in Society journals, women's magazines, the foreign and colonial press. Display matter and special terms for Window Display for home orders can be obtained on request.

EXPORT

Exporters and Shippers should note that NO export licence is required for "Larola" and "Glycerine and Cucumber."

Larola

Write for prices and terms of all Larola products to
M. BEETHAM & SON
CHELTENHAM ENGLAND

THE ONLY NON-COMPETITIVE "LIPSTICK" IN YOUR SHOP



Many style-conscious women are steady users of PRINCESS PAT Lip Tone. Do not disappoint your more fashionable and up-to-date customers by being out of LIQUID Lip Tone. Be ready with an ample stock and a full range of shades . . . show Lip Tone and you'll sell it, and other Princess Pat Beauty Preparations.

**—STAYS ON THE LIPS—
BUT NOT ON THE SHELF**

liquid lip tone
PRINCESS PAT

LIQUID LIPTONE - - - 6/6 Per Bott.
LIPTONE Thinner & Remover 1/6 per Bott.

Write now for particulars of this and other products to :

THE BEVINGTON MERCHANDISING CO. LTD.
62/66 STONEY LANE LONDON, E.C.3

Phones: Bishopsgate 7734/9537

Grams: Medicines Eda London.

It pays to Feature



TANGEE
LIPSTICK
Colour Selection
links
Fashion
with
Beauty

TANGEE
LIPSTICK
Beauty on Duty

Strong and appealing National ads. of this kind tell YOUR customers why Tangee 'Colour-Selection' make-up is ideal, whatever they are wearing—from uniform to the most glamorous evening gown.

TANGEE
THE WORLD'S MOST FAMOUS LIPSTICK

This unique
"Colour Selection"
Lipstick means

1. Bigger sales with less trouble
2. Economy of storage space
3. No £.s.d. tied up in a multiplicity of slow moving and unsaleable shades

Send for striking new showcards to:

Newbery & Phillips Ltd.
31/33 Banner Street, London, E.C.1
Sole Distributors for:
Luft-Tangee (London) Ltd.

**NEW . . . an effective Show-card
to encourage the Sales of**

MERCOLIZED WAX

Show it and take advantage of constant advertising and the handsome profit now available.

16/- 23/- 2/- 3/6
per doz. retail

DEARBORN (1923) Ltd.

TELEPHONE: HOLBORN 9669



Excellent Show Material and Counter Booklets on request.

A BONUS of 10% on £3 assorted orders is offered for a display of MERCOLIZED WAX.

**We make
Private
Brand
Cosmetics
for the
Trade**

B.P.S. products are sold daily by thousands of retailers under nationally known labels. B.P.S. Cosmetics increase your sales and build your reputation.

WE SPECIALISE IN

LIPSTICKS

(all types)

BEAUTY MILKS

FACE PACKS

FACE CREAMS

FACE POWDERS

NAIL WHITES

EYEBROW PENCILS

CREAM and COMPACT ROUGES

MASCARAS

EYE SHADOWS

TALCUMS

DEODORANTS

We have a consulting Beauty Specialist on our staff whose services are available to our clients.

B.P.S. Ltd.

**IMPERIAL WORKS
RYLAND ROAD
LONDON, N.W.5
GULLIVER 5571/2**

SINCE 1850
BURGE, WARREN & RIDGLEY LTD.
HAVE ENJOYED
THE TRADE'S CONFIDENCE
as suppliers of
DRUGGISTS' SUNDRIES
TOILET REQUISITES
RUBBER surgical APPLIANCES
CONTRACEPTIVES

PUFFS, TOOTHBRUSHES,
WASHING SQUARES,
COMBS, ATOMIZERS,
DOUCHES, SYRINGES,
HOT WATER BOTTLES
AND COVERS

91-92 SAFFRON HILL, LONDON, E.C.1

Telephone: Holborn 0050

Telegrams: "Drugsund, Smith, London"



Adelaide Grey

announces

- ★ extended range of 'Laleek Beauty' Preparations
- ★ improved packs ★ compelling Display aids
- ★ new and attractive advertising

You are invited to write for full particulars. Better still, ask our representative to call.

ADELAIDE GREY, LTD.
27 OLD BOND STREET, LONDON, W.1

JOHN FREEMAN & CO. LTD.

ESTABLISHED 1910

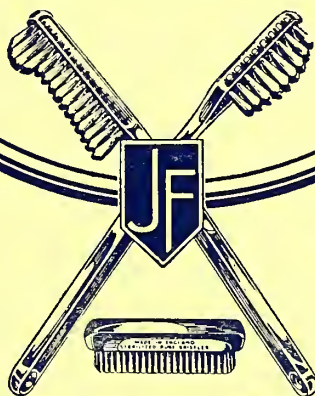
WHOLESALE AND EXPORT ONLY

FOREST BRUSH WORKS, WALTHAMSTOW, E.17

'Phone : KEYstone 4215 (3 lines)

City Office and Export : 84 FORE STREET, E.C.2 'Phone : METropolitan 9556

Manufacturers
of TOOTHBRUSHES
DENTAL PLATE BRUSHES
NAIL BRUSHES—FACE
POWDER BRUSHES
HAIR BRUSHES
DRESSING COMBS



QUALITY

SERVICE

DESIGN

J.F.L.

● EIGHTEEN-PENCE BUYS A COMPLETE BEAUTY TREATMENT!



YEAST-PAC FOUNDATION CREAM — YEAST-PAC BEAUTY MASKS — YEAST-PAC SOAP

— all firm favourites and big sellers — are now sold in the convenient sixpenny size.

Your customers have read of Derma-Yeast—the Marvellous revivifying principle which builds up and strengthens tired tissues. YEAST-PAC FOUNDATION CREAM—an extremely important member of the YEAST-PAC family—is now sold in the convenient sixpenny handbag size. With YEAST-PAC BEAUTY MASKS and YEAST-PAC SOAP it forms a complete beauty treatment. It is being advertised to the public in widely circulated national and weekly papers. It will sell and sell . . . See that you take advantage of the great YEAST-PAC movement. Attractive display material for your counter will be supplied on request. Remember—

Yeast-Pac Foundation Cream, 6d. Yeast-Pac Beauty Masks, 2/6, 1/3, 6d. Yeast-Pac Soap, 6d.

TRADE DISCOUNT: 33 ⅓ %

Write for special bonus terms to :

J. E. CROSS & CO., LTD., 11, DIANA PLACE, LONDON, N.W.1.



Grossmith's Old Cottage Lavender

IN THE NEW GREEN SERIES



A FAMOUS FRAGRANCE IN A FINER PACK

Old Cottage Lavender is now packed in a smart Paris designed carton and presented in a distinctive green bottle which stands well and has the added advantage of protecting the perfume from strong light. The delightful freshness and individuality of this pack is accentuated by the attractive show-stand which should have a favoured position in your next perfume display.

Pre-war prices are still being maintained, BUT we advise immediate ordering

Retail	Wholesale per doz.
1/-	8/-
1/6	12/-
2/6	20/-
3/6	28/-
5/-	40/-

The above are singly packed

TRIAL SIZE IN SHOW CARTON
(as shown above at left)

Retail 6d. 4/- per doz.

GROSSMITH



29 NEWGATE STREET, LONDON

CITY 2891



Popular Size 2/6
Economy Sizes 4/9 and 6/9

a 'best-seller' in 1914...
a bigger seller in 1940

Now, more than ever, women find the need for a preparation to keep the hands soft and white. First choice in 1914... ESS VIOTTO is still first choice in 1940. Recommended consistently by all the leading beauty experts and backed by increased national advertising in high-class media. Display and recommend ESS VIOTTO... made by Bronnley... a guarantee of quality that ensures satisfied customers and profitable sales.

ESS VIOTTO
for the Hands and Complexion

by Bronnley

H. BRONNLEY & CO. LTD., LONDON, W.3.

Flaroma

CONCENTRATED



PINE BATH ESSENCE

ALSO GARDENIA, ROSE GERANIUM,
ORANGE FLOWERS, CARNATION,
COLOGNE, LAVENDER,
VERBENA

1 oz.....	1/-.....	Per Doz.	8/-
2 „.....	1/6.....	„ „	12/-
4 „.....	2/6.....	„ „	20/-
8 „.....	3/9.....	„ „	30/-

'ALPID' PINE BATH CRYSTALS 3/-..... Per Doz. 24/-

From Wholesalers or Direct

ALSO LARGE RANGE OF TALCUM POWDER, BATH
SALTS, TOILET WATERS, ETC., PACKED IN VERY
ATTRACTIVE HAND DECORATED CONTAINERS

Illustrations and full particulars gladly sent on request

The ABIETSAN Mfg. Co. Ltd.,
Concordia Works, Carmichael Rd., S.E.25

Phone: Addiscombe 2261-2-3

Showroom: 47/8 Berners Street, London, W.1

NOW IS THE
TIME TO SELL

Elfrida

ROUGE
LIPSTICKS
NAIL VARNISH

Outstanding value and merit
Quick Sellers—Big Profits

★ **Retail-4d.**

Write for full list of all Elfrida Beauty Aids to
ELFRIDA PERFUMERY CO. RAWDON, LEEDS

ANIMAL,**MINERAL OR VEGETABLE . . .**

All have their separate uses in the manufacture of our Bush
Ottos and Perfume Bases. Although we have not attempted to
breed Whales at our Works,

Musk Deer at Mitcham,

or plant Patchouli in Penzance,

our chemists guarantee that we use only the finest quality ingre-
dients obtainable from such necessary natural sources. Skilfully
blended with Synthetics of our own manufacture they enable us
to offer, even in these difficult times, an extensive range of Per-
fume Compounds for all the requirements of the manufacturing
perfumer.

W. J.**BUSH****& CO. LTD.****ASH GROVE, HACKNEY, E.8 :: :: ::**

CLIssold 0461-6

Raw Materials for Perfumery

EVERYTHING FOR THE CHEMIST

THE "ASHFIELD" TOILET PREPARATIONS



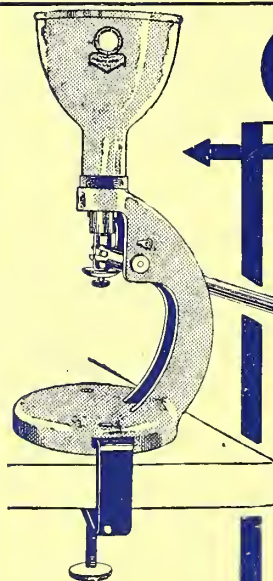
You will find the smartly-packed "ASHFIELD" Toilet Series a most profitable line. The preparations are of an exceptionally high quality—no expense has been spared in making them a range of Toilet Articles second to none. They are packed in oval bakelite-capped bottles, with distinctive gold, black and red labels, making the style very neat and modern. Every Toilet necessity is included and prominent displays in the window or on the counter will bring convincing results.



★ TOILET PARAFFIN, PINE TAR SHAMPOO, EAU DE COLOGNE, HONEY AND FLOWERS, HAIR SETTING LOTION, FIXATIVE HAIR CREAM, SUNBURN LOTION, BAY RUM, CHAMOMILE SHAMPOO, OIL OF VIOLETS, HENNA SHAMPOO, BRILLIANTINE, OIL OF JASMIN, LANOLINE CREAM, COCONUT OIL SHAMPOO.

Brook, Parker & CO. LTD.

7, 9, 11 ASHFIELD, HORTON ROAD, BRADFORD



Sole
Manufacturers :

Q.P. EMULSIFIERS

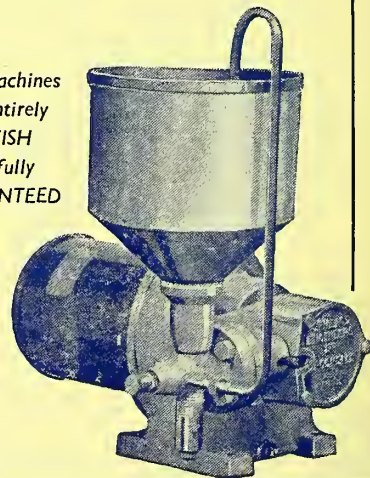
HANDY AS A PIPETTE!

With this "Q.P." Hand Model you can make your own Hair Creams, Hand Lotions and Gum Emulsions, etc., to sell at competitive, as well as profitable, prices.

The Power Machine (on the right) operates on a similar principle to the Laboratory model. The pressure can be varied up to a maximum of 350 lb. per square inch. It has an output of 20/25 gallons per hour, but small quantities can be treated as effectively as in our Laboratory model.

Gum Solutions and Oil can be emulsified perfectly, making a beautifully smooth cream, equal in appearance and texture to the most expensive preparations on the market.

The Machines
are entirely
BRITISH
and fully
GUARANTEED



ORMEROD ENGINEERS

LIMITED

SHAWCLOUGH - ROCHDALE

TEL.: 4355 ROCHDALE

SOLPORT GOODS ARE GOOD GOODS



SOLPORT
BROTHERS LIMITED

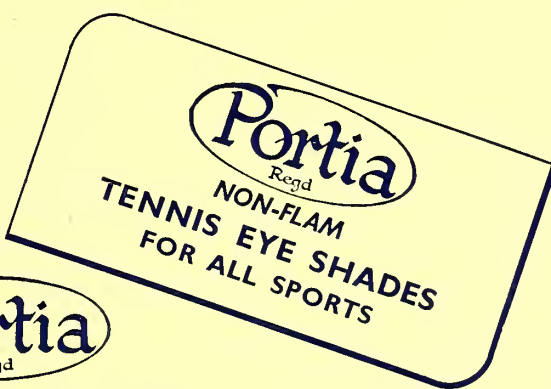
Factory, Warehouse, and Offices :

184-192 GOSWELL RD., LONDON, E.C.1

Telegraphic Address: "Solport, Barb, London."

Telephone: Clerkenwell 2472-3-4

*Branch Factories at : 1 LEVER STREET, 377 CITY ROAD and
31 DINGLEY PLACE, CITY ROAD, E.C.1*



CORN PLASTERS

CARTONED OR CARDED

and a host of other

DRUGGIST'S SUNDRIES AND TOILET REQUISITES

Send us your enquiries

SOLPORT GOODS ARE GOOD GOODS

[illegible]

1940

International Sponge Importers, Limited

Buyers are invited to call and inspect our large and varied stocks, and they will convince themselves that they are dealing in the "CHEAPEST MARKET."

3 Special Offers in SELECTED SPONGES

LESS 33½ PER CENT.

**Every Sponge
Cellophane
Wrapped**
ALWAYS FRESH AND CLEAN

ANNOUNCING CUSSENS
CREAMOLIVE BEAUTY SOAP



3^D Retail

Cussons New Toilet Soap in its charming floral wrapper. Specially moulded to fit snugly into the hand. Exceptional value, it still shows you a full margin of profit.

Cussons
SONS & CO, LTD.

KERSAL VALE... MANCHESTER 7.



"COUNTER propaganda"

... *says 'TILLY'*



Our advertising consultants tell us, after overworking their research department, that many millions more women see the big, new Curly Top and Vosemar advertising, than hear our friend Lord Haw Haw—and when you realise that **25,725,000 advertisements appear each month** for these two lines, it's not hard to believe.

So here's your opportunity for *counter-propaganda*—display Curly Top and Vosemar regularly.

Attractive SHOWCARDS gladly
sent FREE on request

Curly Top

For Babies and Toddlers. Creates natural curls. Guaranteed perfectly harmless. Retails at 1/3 per tube.

Vosemar

For Adults. Induces the hair to curl and wave naturally. No heat or irons needed. Retails at 1/6 per tube.

VOSEMAR LIMITED
BURY · LANCASHIRE



ARITHMETIC IN BUSINESS . . .

In 1939 retailers sold three times as much Goya perfume as they did in 1938. So far in 1940 they have sold three times as much as they did in the same period in 1939—in fact Goya has been outstandingly successful with his perfume. Retailers who display the new Goya face powder report an even larger volume of business in this line than in the perfume—business that can be achieved with the minimum of stock for GOYA face powder is sold in five shades but in ONLY ONE PERFUME. The fragrance of Goya face powder has been specially blended to harmonise with any of the Goya

scents or with any other first-class perfume. With a stock of only five boxes you can satisfy any customer who asks for Goya powder. Last Spring Goya was the only perfumer to advertise on a large scale and this year he repeated the experiment. From mid-February onwards all the leading Women's Magazines, the National Dailies and Picture Post have been carrying regular Goya face powder advertisements. As the front page of the Daily Mail is no longer available to advertisers the £1400 spent on this space in 1939 is being devoted to increasing the number of small advertisements and full colour magazine covers.

GOYA PERFUMES

42/-

21/-

6/6

HANDBAG SIZE 1/-

GOYA FACE POWDER

—in lovely non-spill boxes

6/6 & 1/3

Trade price less 33 $\frac{1}{3}$ % discount.

Obtainable from all wholesalers or

direct from **GOYA, PICCADILLY, LONDON, W.1**





**the
supreme
dog food**

NEW RETAIL PRICE

Owing to the increased cost of ingredients and production, it is necessary to increase the retail selling price of "Red Heart" to

7d per tin

EFFECTIVE MARCH 18th 1940

When announcements will appear
in National Newspapers

Price to the trade

21/6 per case of 48 tins

PROFIT 6/6 per case

In 3 Diets
A, B & C



JOHN MORRELL & CO. LTD. LIVERPOOL & LONDON

BOTTLES

BRITISH MADE

OF QUALITY

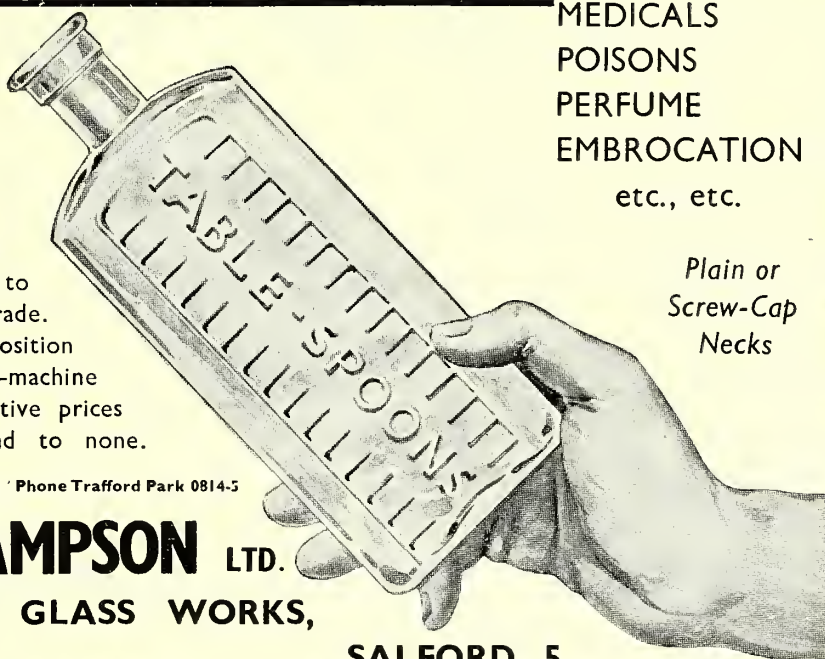
For over 80 years we have been making bottles of every description to meet the needs of the Trade. We are in a favourable position to produce all types—machine made—at highly competitive prices and of a quality second to none.

We shall welcome your enquiries. Phone Trafford Park 0814-5

FREDK. HAMPSON LTD.

PERSEVERANCE GLASS WORKS,

SALFORD, 5



TAPERED, PYRAMID, DOMED AND FLANGE CORKS COMPOSITION AND BAKELITE STOPPERS

THE MOST COMPETITIVE MANUFACTURERS IN
THIS COUNTRY

MUNDET CORK PRODUCTS, LTD.

20/21 BERMONDSEY SQUARE, LONDON, S.E.1

Telegrams: MUNDETCOMP, BERM, LONDON

Telephone: HOP 2043-6

WAGNER'S DRY BOTTLE CAPS

BEST IN QUALITY & APPEARANCE

PROMPT DELIVERIES



R. V. WAGNER

33 BROOKE ST., LONDON, E.C.1 Tel. Holborn 5090

People are now "feeling the pinch"

... take advantage of this and sell them

"HOBSON'S CHOICE"

The best known and most reliable Feet Plaisters and Powders. Their long standing reputation combined with extensive advertising will bring thousands now doing more walking to ask for HOBSON'S CHOICE when their feet "feel the pinch."—Now is the time to take advantage of this certain demand and increase your stock. Write:—

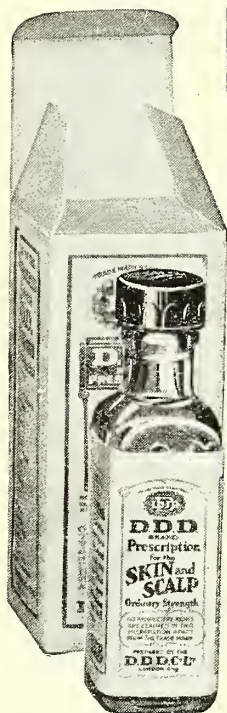
HOBSON, TRIMBLE & Co. Ltd., UNION Ho. LEEDS, 2.

Or from the usual Wholesaler.



New Combination Pack 6d.
Plaisters: 1½d., 3d. and 4½d.
Powders: 1d. pkts. and 4d. Sprinkler Boxes

There are *THREE* Sales Angles for **D.D.D. PRESCRIPTION**



The vigorous and extensive Press publicity campaign behind D.D.D. Brand Prescription presents the merits of this well-known product from three different angles. Firstly, it is advertised as an always reliable remedy for all forms of skin troubles. Secondly, there is a special appeal to women emphasising its value as a cleansing lotion, which, used at night, lays the foundation of a healthy and beautiful skin. Thirdly, it is pointed out that in cases of emergency, D.D.D. Brand Prescription provides the ideal first aid treatment for burns, scalds, slight wounds, etc. These three sales angles keep D.D.D. Brand Prescription a quick and regular selling line.

PRICE LIST

D.D.D. Brand Prescription (Small Bottle)	... 1s. 3d.	D.D.D. Soap (per Tablet)	... 1s. 0d.
" " " (Medium Size)	... 3s. 0d.	D.D.D. Vanishing Cream (Large Jar)	... 1s. 6d.
" " " (Large Bottle)	... 5s. 0d.	D.D.D. Cold Cream (Large Jar)	... 1s. 6d.
" " " (Extra Strong)	per Bottle 3s. and 5s.	D.D.D. Talcum Powder (per Box)	... 1s. 6d.

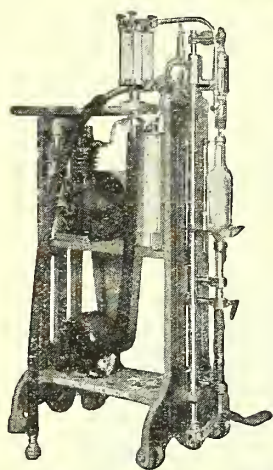
Less usual Discounts

D.D.D. COMPANY LTD.

3 FLEET LANE, LONDON, E.C.4

TELEPHONE: CEN. 2185

ROBERTS' PATENT "LEO" VACUUM FILLER



for Glass, Stone,
and Tin Bottles.
Fills all sizes from
drachm to quart—
long, short or
sprinkler neck.

**Clean and Rapid
No Over Filling
Broken Bottles
Rejected
Easy to Clean
Self Rinsing**

WRITE FOR
PARTICULARS

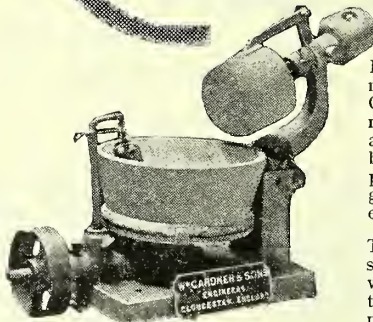
Roberts' Patent Filling Machine

**Company Limited
BOLTON, LANCASHIRE**

Makers of every description of Bottle Filling and Shallow Jar and Tin Filling Machine for the Chemists' use

ALL RIGHTS RESERVED

GARDNER MILLS *Save money*



In the Gardner range of mills there are Combined Grinders and Sifters that not only frequently save a separate sifting process but achieve a very high proportion of the finest grades of powder with exceptional rapidity.

There are "Laboratory" size End Runner Mills with an output capacity that will adequately meet all your needs.

There are Ball, Pot and Pebble Mills, and Roller Mills which will enable you to produce the finest kinds of chemical and cosmetic powders, pastes, creams, etc.

They are all fully described in the Gardner Catalogue. Write for a copy now.

**WILLIAM GARDNER & SONS (GLOUCESTER) LTD.
BRISTOL ROAD, GLOUCESTER**

Telephone. 2288 (3 lines) Telegrams: "Gardner, Gloucester."
LONDON: 19 Grays Inn Chambers, 20 High Holborn, W.C.1
Telephone: Chancery 7347.

South Africa . . .

Do you desire a share in the trade of this prosperous country ?

★ DRUGS & TOILETS (Pty). LTD.

have wholesale distributing offices in Johannesburg, Cape Town, Durban, Port Elizabeth, East London, Bulawayo and Salisbury.

★ ENGLISH MANUFACTURERS

of Patent and Proprietary Medicines and Toilet Preparations desirous of extending their activities to this very remunerative and rich market are invited to take advantage of this established organisation and the facilities offered.

Apply for further information in first instance to

Messrs. J. A. EWING & Co. (London) Ltd.

"Ewing House," 73 Chiswell Street, London, E.C.1.

R.F.S.

For
**TABLETS
PILLS &
COMPRESSED
LOZENGES**

**BULK or PACKED, LARGE
OR SMALL QUANTITIES**

We will gladly give
you quotations

Also Manufacturing Special-
ists of
OINTMENTS CREAMS, etc.
PURITY AND ACCURACY
GUARANTEED

T. H. WALTON & CO LTD

MANUFACTURERS TO THE WHOLESALE TRADE

BATLEY, YORKS. Tele. 640

Keen Buyers Buy

KAY
BRAND
**LINSEED
COMPOUND**

in lots of

20/-

(display
optional)

or **50/-**

(display
terms)

Consult your Wholesaler's Price List and
See What You Save

Effective management of Measles with

IMMUNE GLOBULIN (HUMAN)

Lederle

FIVE YEARS OF CLINICAL STUDY and laboratory investigations have led to the general acceptance of Immune Globulin (Human) *Lederle*, in the control of measles. With the measles season on its way, bear in mind that this material affords a tried and tested means of modifying the attack and of greatly reducing the danger that severe complications will occur.

A relatively small dose, administered to exposed children, serves to *modify* the disease so that severe cases or complications rarely occur; the ensuing modified attack, however, is sufficient to confer lasting immunity.

Immune Globulin (Human) *Lederle* is indicated also for *complete prevention* of measles in exposed children who are debilitated or hospitalised. The preventive dose is usually about twice that recommended for modification and the immunity conferred is temporary. Supplied in packages of 2 c.c. vials, 10/-; 10 c.c. vials, 41/-.

A PRODUCT OF THE LEDERLE
LABORATORIES INC., NEW YORK,
U.S.A. DISTRIBUTED IN ENGLAND
BY CHAS. F. THACKRAY, LTD.,
THE OLD MEDICAL SCHOOL,
LEEDS, AND 252 REGENT
STREET, LONDON, W.1





This Tampax display in a leading London Store sells £20 worth of Tampax per week

● EVERY MONTH more and more women, attracted by the promise of greater freedom and daintiness, are changing over to Tampax, the modern hygienic sanitary protection worn internally ● They are looking for it in your shop. Discover for yourself how a Tampax display sends profits soaring ● Work it out for yourself on a yearly profit basis. Every 1/6 packet of Tampax shows you 4½d. profit. And remember this is not a market where a cheaper article is bought in greater quantity. Each woman requires an almost fixed quantity of sanitary protection in a year. So every woman converted to Tampax means bigger profits for you.

TAMPAX
REGD. TRADE MARK

SANITARY PROTECTION
Worn Internally



**NO BELTS
NO PINS
NO PADS**

*Women buy
TAMPAX
where they
see it
displayed!*

TAMPAX TRADE TERMS

Packets of Ten

WHOLESALE **13/6** PER DOZ.
RETAIL **1/6** PER PACKET

Packets of Six

WHOLESALE **9/-** PER DOZ.
RETAIL **1/-** PER PACKET

Packets of Three

WHOLESALE **4/6** PER DOZ.
RETAIL **6d** PER PACKET

**NO INCREASE
IN PRICE!**

Manufactured in England by Tampax Ltd.,
London Office: 10 Bolton St., London, W.1.
Factory: Belvue Road, Northolt, Middlesex.
Sole Distributors: **SPLENDOR LTD.**,
5 Beestmarket Hill, Nottingham.

Try a display of TAMPAX in your window and on your counter NOW and watch profits mount



**INCREASE YOUR
ROZALEX
SALES**
By showing this
Attractive Counter
Display
KEEPS HANDS CLEAN
KEEPS HANDS HEALTHY

Display Cartons of
1 dozen 6d. Tubes
Display Cartons of
1 dozen 1/- Tubes
Household size 2/6
Discount 33 1/3 %

Shaw Matter and Literature Supplied
ROZALEX LTD.
Yorkshire House, Cross Street, Manchester, 2

CLINICAL THERMOMETERS

30-sec. Lens front, long bulb.
● Each in metal case.
● Maker's certificate with each.
● British made.

Special price—1-do. lots, 11/6 doz.
Any quantity post paid on receipt of remittance
WAR ADVANCE PRICES

THOMAS SWALES
ST. STEPHEN'S ROAD, LEEDS, 9
"SWALES FOR SUNDRIES"

Sold through
Chemists only
Direct or
from your
Wholesaler



Display and
Recommend
these
Profitable
Specialities

Trade Mark
KASCO DIGESTIVE TONIC : KASCO INTERNAL ANTISEPTIC
KASCO ANTISEPTIC PASTILLES
REGULARLY ADVERTISED
Tel. 2530
F. W. CASSELL & Co., Ltd., MANSFIELD ROAD, NOTTINGHAM

TRADE ENQUIRIES INVITED FOR—

CARRAGEEN MOSS


ALL GRADES
INCLUDING POWDER

J. W. CUMMING & SON LTD., 5 TITHEBARN ST., LIVERPOOL 2.
Phone: BANK 4488 Grams: "CARMOSS" Liverpool

TRAGACANTH

SPECIALISTS IN B.P. POWDER
Also Technical and Industrial qualities. All Grades of Whole
Flakes as imported. Samples and prices on request.

FREUDENTHEIL, SMITH & Co., 21 Mincing Lane, London, E.C.3
Tel. Address: 'Freudenruf' Tel.: MANsion House 6600 Estd. 1826



MANOIDS

THE POTENT BRAIN & NERVE TONIC
FOR MEN

1/3 size - 7/6 doz.
2/3 - 13/6

THE
Acton Pill & Tablet Co Ltd
ASH VALE, SURREY

FROM ALL SUNDRIES
HOUSES, OR

PATTINSON'S BRAND

Cream of Magnesia

Ask us to send you 12oz. sample bottle FREE

THE WASHINGTON CHEMICAL COMPANY
BRANCH OF TURNER AND NEWALL LIMITED
Washington Station, County Durham

The **PIFCO** Home
VIBRO-MASSAGER A sure sales
winner at

Efficient, quiet, safe and reliable.
Complete with 4 applicators in
mirror lined case. Unbeatable in
price and use

27/6

PIFCO LTD. Watling St. Manchester
London Address: 58 City Road, E.C.1

RETAIL



MOSANS

Non-Greasy, Odourless

QUININE PESSARIES

15/- per doz. boxes
Obtainable from all Wholesalers
OR
MOSANS LABORATORIES, S.E.27

OPTICAL TUITION

FOR THE
S.M.C., B.O.A. and N.A.O. DIPLOMA Examinations

Particulars:—
C. A. SCURR, F.S.M.O., F.B.O.A., F.N.A.O., F.I.O., F.C.O. M.P.S.
50 HIGH STREET, BARNET, LONDON, N.

*Good Profits
Quick Sales*



for home-brewing Mason's Herb Beer—the
delicious drink. 9d. bott, 7s. 3d. doz. (subj.)
Supply other Necessary Ingredients
MASON'S DRIED YEAST, easy to use.
MASON'S SWEETENING—guaranteed pure
—no saccharin, the perfect sugar substitute
NEWBALL & MASON LTD., NOTTINGHAM

Mason's Dried Yeast
9d. per tin. 7s. 3d. doz.
Mason's Sweetening
7 1/2d. pkt., pkd. in display
container 6s. doz. (subj.)

THE NATIONAL ASSOCIATION OF OPTICIANS

The next examination will be held at Edinburgh on
Tuesday, Wednesday and Thursday, May 28th, 29th, and
30th. The last date of entry being April 29th.

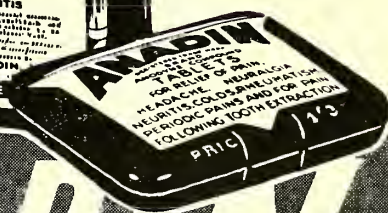
REVISED SYLLABUS, ETC.
SECRETARY, N.A.O., 130 Princes Road, Liverpool, 8

Important to Non-Subscribers:—

You should of course read this journal every week. It gives latest Drug Trade News presented in an interesting and unbiased fashion. The subscription is a nominal one—only 20/- per annum. Send remittance for this amount to the PUBLISHER, 28 ESSEX STREET, STRAND, LONDON, W.C.2, and ensure a weekly copy for the next 12 months, together with a copy of the Chemist and Druggist Diary and Year-Book published at the end of December next.

We can supply any quantity of

Our large reserves of raw material make it possible to deal immediately with your requirements for a preparation now more than ever in demand as an effective remedy for **Colds, Nervous Tension, Neuritis, Headache, Neuralgia, Rheumatism and Periodic Pains.**



Before sending your order examine your stocks in the K.B.A. Group — KOLYNOS, 'BiSoDoL', and 'ANADIN'.
Kolynos (Sales) Ltd., 12 Chenies Street, London, W.C.1.

WINDOW DISPLAY TERMS

If bought on usual Window Display Parcel terms, the following discounts apply. Parcels may be of the assorted products and sizes distributed by Kolynos (Sales) Ltd.

£10 parcel	...	...	15 %
£5	"	...	12½ %
£3	"	...	10 %

"ZONEX"Products are All-British
and guaranteedSend for new
Binocular Catalogue**ZONEX** REGISTERED
TRADE MARK
TELESCOPES**SAME GOOD PROFITS FOR DEALERS!
NO INCREASE IN RETAIL PRICES YET!
NOW BETTER VALUE THAN EVER!**

We shall endeavour to maintain this policy but strongly recommend you to buy early and contract your season's requirements to safeguard against possible price increase on replacement stock.

Photographic showcards and price tickets, etc., that compel attention are supplied free.

The "Zonex" **SEAGULL**. Unique in looks and value, a high precision instrument with one adjustment, simple to focus. **Retail 1/11**The "Zonex" **CRUISER**. A well-balanced high power model with two adjustments, high magnification. **Retail 2/11**The "Zonex" **NORTH STAR**. Entirely new conception in low priced telescopes, a fine range instrument with three adjustments, high magnification. **Retail 3/11**

Also "AERO" 5/6

Each Telescope is complete in smart leatherette case.

PARTICULARS FROM

NAZONE LTD., "Zonex" Works, Blackpool, Lancashire
OPTICAL AND SCIENTIFIC INSTRUMENT MANUFACTURERS**ZONEX BINOCULARS****THE WORLD'S BEST, BRITISH MADE, FULLY GUARANTEED****Zonex "EAGLE" Retail 12/6**Trade 7/11 each; dozens 7/6 each; 24s 7/2 each
all less 5%**SIX WINNING MODELS
FROM 12/6 TO 25/- EACH**Arrange your 1940 season contracts
for these profitable, fast selling,
low priced optical goods now**NO CHANGE IN OUR USUAL GOOD PROFITS FOR DEALERS**Send to-day
for illustrated
pamphlets and
quotations of
Telescopes and
Binoculars be-
fore placing your
season contracts
for optical
goods.**Zonex "HAWK" Retail 17/6 with case**

Trade 11/1 each; dozens 10/6 each; 24s 10/- each, all less 5%



The CHEMIST AND DRUGGIST SUPPLEMENT

This Supplement is inserted in every copy of The Chemist & Druggist

28 ESSEX STREET, LONDON, W.C.2.

MARCH 16
1940

EASTER HOLIDAYS

Next week THE CHEMIST AND DRUGGIST SUPPLEMENT will close for Press a day earlier than usual. Any advertisements intended for the Supplement of March 23rd should reach this office not later than first post on

WEDNESDAY, MARCH 20th

Advertisements received later will be inserted in the issue of March 30th

The Offices of "The Chemist & Druggist" will be closed from Thursday evening March 21st, to Tuesday morning March 26th.



RED CROSS APPEAL

COMFORTS FOR THE SICK & WOUNDED

In a great war the peace-time resources of the Army Medical Services must be augmented. H.M. Government has accorded the Red Cross and St. John official recognition for co-ordinating all voluntary offers of assistance throughout the Empire to sick and wounded combatants and civilians injured as a result of enemy action.

WILL YOU PLEASE HELP?

Gifts in kind will be gratefully received by Lord Ebbisham at 54 Victoria Street, S.W.1, and cash contributions will be welcomed by The Lord Mayor of London at the Mansion House, London, E.C.4. All donations should be marked Lord Mayor of London's Red Cross and St. John Fund.

ALL WILL BE ACKNOWLEDGED

THE ASSOCIATION OF MANUFACTURING CHEMISTS, LIMITED
(Business Agency, Transfer & Valuation Department)
 KIMBERLEY HOUSE, and at 5 RUMFORD PLACE,
 Holborn Viaduct, LONDON, E.C.1 LIVERPOOL, 3.
PARKIN S. BOOTH, Valuer. Tels.: CITY 3691 (4 lines)
VALUATIONS. SALES OF BUSINESSES. STOCKTAKINGS.
Enquiries Invited.

BUSINESS FOR DISPOSAL

DERBY. Drug Store, main street. Good scope N.H.I. Rent and rates £65 p.a. All photographic agencies. Price, including Fixtures and Stock, £130. 219/16, Office of this Paper.

DEATH vacancy. Well established pharmacy with Kodak agency, near South Devon market town. Only chemist in district. Single fronted lock-up shop at reasonable rent. Returns £900-£950. Stock and fixtures independently valued, good opportunity for capable pharmacist. For quick sale will accept £350. Apply: Gilbert H. Stephens & Sons, Solicitors, 17 Southernhay East, Exeter.

FOR SALE.—Chemist, Druggist and Dispensing Business; established 30 years; reason selling ill health; main road, near City, Birmingham; good turnover; low rental; books kept. Price, including large stock, £475, or nearest offers; good opening. Kelly, 380 Stratford Road, Birmingham.

UNIQUE opportunity for Chemist. N.W. London, expensively and specially fitted lock-up shop in station entrance for chemist. No premium required. Rent only £150 p.a. on short agreement or lease. Property Co., 31 Bracknell Gardens, N.W.3. HAMpstead 4000.

WESTERN Counties safety zone. Old established Drug Store for sale, double fronted, main street, populous neighbourhood. Capable of very considerable increase under qualified. Slight opposition—Kodak-Selo. 220/8, Office of this Paper

AGENCIES

AGENTS with established pharmaceutical connexion in London, Midlands, and other areas required to extend business in General Medicinal Tablets, Pills, etc., and other pharmaceutical products both bulk and packed. Excellent opportunity for experienced men. 213/7, Office of this Paper.

LONDON Manufacturing Chemists covering the country would consider Agency in a Good Speciality. 362/280, Office of this Paper.

BOOKS

BOOKS, PHARMACEUTICAL, OPTICAL, MEDICAL, and current edition, supplied by return; second-hand copies sometimes available; books purchased—please submit lists before forwarding; new books on loan library terms for students—give guarantee of definite return after period of use. Orders value £2 carriage paid in Great Britain. Advise requirements for prompt quotation. Gower, 190 Clapham Road, S.W.9. Phone: REL. 3728.

APARTMENTS

THE HAMPDEN RESIDENTIAL CLUB

A COMFORTABLE club for Gentlemen. Polygon Road, N.W.1, between King's Cross and Euston. 300 Bedrooms, 16s. 6d. to 24s. p.w., including bath and personal services. All meals à la carte. Large Club-rooms, Library, Billiards-room, Reading-room, and Study for students. Prospectus from Secretary. Euston 2244.

WANTED

CASH Till, National, wanted at once for cash trade. Must be bargain. Full particulars to S. Gower, 63 Westbourne Terrace, W.2.

SITUATIONS OPEN

RETAIL (HOME)

EAST London, young Qualified Manager wanted for small Branch, living accommodation if desired; salary and commission. Hooker, 46 Upton Lane, Forest Gate, London, E.7. GRA. 2945.

LONDON, E., Assistant (Qualified preferred but not essential). Give full particulars of experience, names of references, when disengaged, age and salary required. Apply (letter only), Chemist, 300 Amhurst Road, London, N.16.

LONDON, N.W.10. Young Lady Assistant, unqualified, with good experience of Dispensing and Counter. Give full particulars of experience, state age and salary. Davies, 59 Dudden Hill Lane, Willesden, N.W.10. Phone: Willesden 1364.

LONDON, S.W. Unqualified Female Assistant required for family type business in Clapham. All-round experience preferred but not essential. Apply CDB/96, Office of this Paper.

LONDON. Young Lady with some experience required for working class pharmacy; excellent prospects for all-round work. Window-dressing an advantage. Apply CDB/98, Office of this Paper.

OXFORD.—Unqualified Junior Assistant, male or female, required shortly in high-class family business, chiefly for dispensing. Send fullest particulars of all experience, state age, salary required when free, and enclose photo. Write Bellamys Dispensing Chemist, 22A Merton Street, Oxford.

PADDINGTON. Experienced Lady Assistant required for Chemist shop, with window-dressing ability. Apply CDB/97, Office of this Paper.

SURREY. Unqualified (Male) Assistant required for a good class Pharmacy. Progressive wages given to a Smart Man who is good Salesman and Window-dresser. Send copies of recent testimonials, salary required, and any useful information to J. Wearing, Pharmacist, Woking.

A.A.A. SMART Qualified Assistant (Male) wanted immediately. Must be able to take charge if necessary, good Window dresser, quick Counter-man, and used to N.H.I. Dispensing. Go prospect for the right man. 219/7, Office of this Paper.

AN exceptional position will shortly be available for a qualified Chemist in a large Pharmacy in the Midlands. Applicant must be tall, well educated, and able to assume responsibility for the Photographic Sales, and of the window and interior displays. He must possess a real liking for counterwork. Salary will be paid according to experience and ability, on commission basis if desired. Send full particulars of experience, height, salary expected, photograph (returnable), when free, and copies of testimonials, to 219/13, Office of this Paper.

BANNISTER & THATCHER, Ltd., will require several qualified men for relief work for three or four months during the summer commencing June or July. Kindly send necessary particulars to 1 Caldmore Road, Walsall.

JUNIOR Sales Assistant, young lady preferred, required for 6 months; no Sunday duty. Apply, stating age, salary and experience to E. J. Dobson, 4 Victoria Road, Deal.

PHARMACY: Female Assistant required, must have had Pharmaceutical and General Shop experience. Widows and single persons only considered. Apply in writing, stating age and experience, to Staff Manager, Royal Arsenal Co-operative Society Limited, 113 Port Street, Woolwich, S.E.18. Endorse envelope "Pharmacy." Note: Canvassing of members of the General Committee or Officials is disqualifying.

QUALIFIED Assistant, Lady, at once for good class business in Sussex. Full particulars in first letter; salary and references. 219/17, Office of this Paper.

QUALIFIED Junior Assistant, young, for medium-class business in Slough. Write, giving full particulars with photo if possible, Brailey & Smith, Radlett, Herts.

QUALIFIED Lady Dispenser wanted for busy Pharmacy. Good general knowledge essential. Unqualified Lady or Gentleman also required. Give usual particulars, references, and state salary required. W. H. Green (Chemists) Ltd., 20 City Arcade, Coventry.

TAYLORS British Chemists require Pharmacists for relief duties in various districts. Permanent employment to suitable men. Apply by letter, giving full particulars to Retail Staff Dept., Taylor British Chemists, 70 Vauxhall Bridge Road, London, S.W.1.

TIMOTHY Whites & Taylors have relief vacancies for qualified Chemists in London and South. Opportunities of promotion suitable men after increased experience. Written applications or giving details of past experience, to Retail Staff Manager, Timothy Whites & Taylors, Ltd., 70 Vauxhall Bridge Road, London, S.W.1.

UNQUALIFIED Assistant required for Counter Work and Window dressing. Knowledge of photography an asset. No half-day Sunday duty. Full particulars to G. B. Osborne, 118 Broad Street, Reading.

UNQUALIFIED (either sex) wanted in April to manage Drug Store. Permanency to suitable applicant. Shop knowledge photography necessary. Berkshire. State age, wages and other particulars. House available if required. 216/1, Office of this Paper.

UNQUALIFIED Assistant. Brighton district. Must be accustomed to busy N.H.I. counter and photographic. Permanency. Please give full particulars of age, height, experience and salary required. 217/3, Office of this Paper.

UNQUALIFIED Assistant for branch shop, permanency, either no dispensing or poisons. Salary and commission, no Sunday Bank Holiday duty. Write or apply in person to Hankinson, Ltd., 223 Ilford Lane, Ilford. Phone ILF. 1756.

UNQUALIFIED Assistant for middle-class business in small fact town. Must have no military obligations. Good stock-keeper accustomed to quick N.H.I. Permanency. Full particulars and photo to Barton, Street, Somerset.

UNQUALIFIED Assistant wanted (lady or gentleman) for good-class Dispensing business. Write, stating experience, age, references and salary required, to A. E. & G. L. Weston, 284 High Road, Stroudham, S.W.16.

UNQUALIFIED (either sex) wanted in April to manage Drug Store. Shop knowledge of photography necessary. State age, wages and other particulars. House available if required. Permanency to suitable applicant. Berkshire. Apply 220/13, Office of this Paper.

WANTED. Assistant for good-class Dispensing and Toilet Business in South West Coast. Particulars to 219/2, Office of this Paper.

WANTED. Unqualified Lady Assistant for Drug and Dispensing Department. Apply, stating age and experience, and enclose copies of testimonials, by first post Tuesday, March 19, to Secretaries, Horbury Industrial Co-operative Society, Ltd., High Street, Horbury, Yorks. Endorse applications "Assistant."

WANTED Unqualified Lady Assistant for Drug Department. Knowledge of toilets, good stock-keeper, and accustomed to N.H.I. dispensing. Applications stating age, salary, experience, etc., to reach the Leek & Moorlands Co-operative Society, Ltd., Russell Street, Leek, not later than Wednesday, March 20, 1940. Envelopes to be endorsed "Lady Assistant."

YOUNG lady Assistant required, Unqualified, capable Dispenser, knowledge of Toilet requisites, Window-dressing. Give particulars of salary, experience, age and references, photograph to be returned). T. H. Parker, Ltd., Chemists, 25 High Street, Haysnam, Sussex (seven miles from Eastbourne). No Sunday or half-day duty.

YOUNG lady Assistant, Unqualified, wanted for one month, possible permanency; personality essential; state experience and present salary. Chessington Pharmacy, Station Parade, North Chessington, Surrey.

WHOLESALE

LANCASHIRE, manufacturing chemists, have executive position vacant. Organising and sales ability necessary. State experience, age, family, etc. CDB/99, Office of this Paper.

LONDON Manufacturing Chemists require Pharmacist, thoroughly experienced making galenicals and pharmaceutical preparations and creams. Good organiser and active hard worker. Highest references essential. Write full details and salary required to 362/285, Office of this Paper.

A prominent firm of Manufacturing Chemists marketing specialities require a representative for Aberdeen. A pharmaceutical qualification is essential. Applicants must give full details of past experience and qualifications. 362/283, Office of this Paper.

MANUFACTURERS and Importers of High-class Chemists' Sundries require Representative or Agent for West and South West counties. About forty years of age, own car and living in West of England. Long experience and references essential. Live connexion offered amongst Chemists, Stores, etc. Salary, expenses commission, or commission only. Full details in confidence. 219/1, Office of this Paper.

OLD-ESTABLISHED Midland Veterinary Chemists require keen, active, energetic, adaptable, fully Qualified M.P.S. (25-35 preferred) to supervise and work with small staff in manufacture Animal Medicines, allied specialities, under direct personal guidance and instruction of the Directors. Must be able to fit in with existing ideas. Reference given one participating in outdoor sports. State full experience, salary required. Send recent photo. 219/10, Office of this Paper.

PROGRESSIVE propagandist in contact with nursing homes for chronics and public assistance hospitals will be interested in new aid to incontinent nursing; recommended in medical and nursing press. Write Blumfield, 149 Alder Road, Liverpool.

REPRESENTATIVE required for Derby, Notts and Lincs. Also South Wales. To work prophylactics on high commission basis. Part-time man preferred with good connexion amongst chemists. 20/4, Office of this Paper.

TABLET Maker and Sugar Coater wanted, for London Wholesale Druggists. 362/270, Office of this Paper.

WAREHOUSEMAN, experienced, required by Manufacturing Chemist handling proprietaries. Full details, age, past experience to 362/284, Office of this Paper.

WET ROOM.—Man required for filling Orders and General Stock-keeping. Must have knowledge of Drug Trade. Apply, Blackwell, Hayes & Co., Ltd., 54 Moor Street, Birmingham, 4.

SITUATIONS WANTED

RETAIL (HOME)

ASSISTANT, Competent Dispenser, Salesman, accustomed to manage. Single, active, elderly, unqualified. Statim, 284 West Parade, Lincoln.

APABLE Assistant, Unqualified (41), married; 27 years' all-round experience, 12 years West End; good Dispenser, first-class chemist. 214/15, Office of this Paper.

ADY Dispenser-Secretary (Unqualified), Book-keeper, Typist. Requires post with Doctor or Hospital, London. Groom, 11 Oakmount Road, S.E.18.

ADY Pharmacist requires work, 4 days weekly or locum., thoroughly experienced, secretarial or otherwise. Chemist, 196 Randolph Avenue, London, W.9.

I.P.S. (28), Square trained, entirely London experienced: used to high-class and N.H.I. Dispensing; excellent references. Desires post in London or suburbs. 81 Chapel Street, N.1. terminus 6516.

PART-TIME, Evenings, Saturdays. Assistant, Retail Apprentice-ship. Part One, studying Manufacture. North or East London preferred. 219/2, Office of this Paper.

PHARMACIST, young, single. Locum or permanent. Free March 18 anywhere. Good references. Brown, 8 Russell Drive, Morembe.

UNQUALIFIED (46 years), contemplating change in June, offers services to Chemist with good prescribing business. Certificated masseur, experienced in radiant heat therapy. Preferably to live over premises where above could be practised to mutual advantage. West country preferred. Unimpeachable references. 219/6, Office of this Paper.

LOCUMS SEEKING ENGAGEMENT

CHEMIST, Locum or Permanency; experienced, highly recommended; disengaged March 26. London or provinces, anywhere Chemist," 29 Plympton Road, Broudesbury, London, N.W.6.

LOCUM or Permanency; 50s.; thoroughly experienced Managing, Dispensing, Prescribing, Photo, etc.; tall, quick worker; excellent references, free Easter. "Dagen," c/o Boultswoods, Chemists, Ilford, Essex.

LOCUM, Qualified, Experienced, Regt. N.P.U. Free March 18. Anywhere. Phone Preston 5131. Wood, 300 Ditchling Road, Brighton, 6.

WHOLESALE

ACTIVE, adaptable (40), height 5 ft. 6 in. Qualified chemist seeks sound position with scope for ability. Indoor or outdoor staff. Previously retail only. "W," 240 Camberwell New Road, S.E.5.

EXECUTIVE (age 36), Ph.C., 5 years retail, 12 years wholesale (one firm—highest standing). Experienced in complete proprietary and general packed goods production and marketing, including costing, buying, showcard production, printing, advertising and sales management. Good organiser with proved creative ability and initiative. CDB/100, Office of this Paper.

IRELAND.—Chemist (33), University trained, wishes to represent good house for Medical Propaganda or ethical lines. 207/7, Office of this Paper.

NORTHUMBERLAND, Durham, Yorkshire. Well-known Traveller, excellent connexion and references, has opening for another good commission line. 219/8, Office of this Paper.

TO London Manufacturing Chemists. Managing Director of successful private Company can afford part-time services to new or growing firm. Thorough knowledge of manufacturing and marketing both home and export, advertising, literature composition, etc. Replies in confidence. Remuneration by results. 214/11, Office of this Paper.

EXCHANGE COLUMN

WANTED

TINCTURE Press wanted, any size up to about 5 (five) gallon capacity. E. M. Murphy & Co., Ltd., 72 Seel Street, Liverpool, 1.

WANTED Clauden Tablets. R. Woolby Brooke, 38 Gloucester Road, London, S.W.7.

FOR DISPOSAL

22 LB. Iodide Potassium P.B., 7s. per lb. Whole parcel or part. 217/8, Office of this Paper.

MISCELLANEOUS

AUTOWAY Personal Weighing Machines overhauled and made like new; moderate charge; transport arranged; old models traded out for new machines. Autoway Co., 13 Wellington Street, Glasgow.

£?—COMPLETE CHEMIST FITTINGS at any price you wish to pay. We have erected in our Showrooms a Complete Chemist's Shop with Metal Shop Front, Window Backs, Correct Window Lighting, Signs and Modern Interior Fittings. Apply for Lists, D. MATTHEWS & SON, LTD., "The Liverpool Shop Fitters," 14 and 16 Manchester Street, Liverpool. Est. 1848.

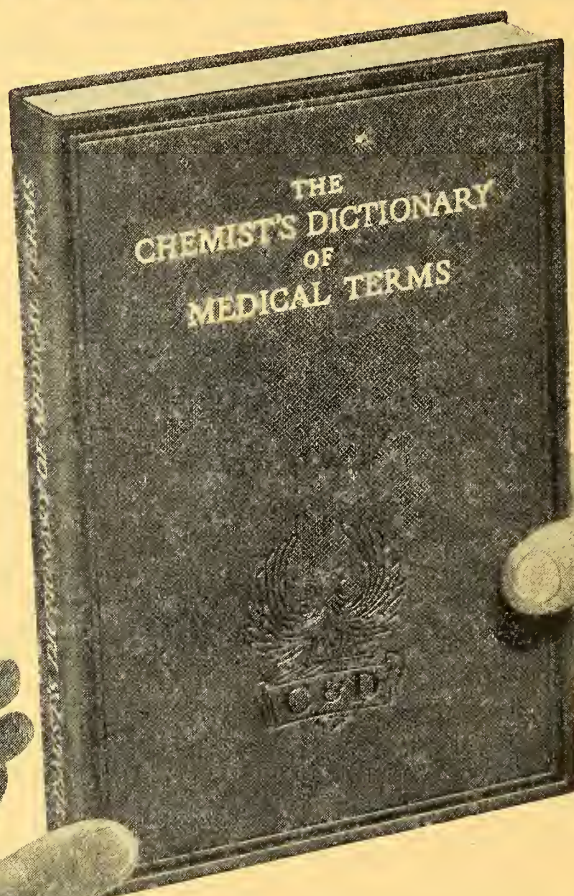
LATE NEWS

Prescribing of Sugar-containing Preparations.—The president of the Pharmaceutical Society (Mr. Walter Deacon) has sent the following letter to the medical Press:—

When the sugar rationing scheme was announced recently all those concerned were gratified to learn that the position, so far as the use of sugar in medicine was concerned, remained unaffected. This pleasing news was, however, accompanied by an indication that every opportunity should be taken to reduce voluntarily the quantity of sugar for medical purposes, in order that a substantial contribution might be made to the general reduction in sugar usage which it was necessary to effect. Such a contribution would not only assist in conserving the resources of the country but might also avoid a compulsory reduction at a later stage. If compulsion is applied there may well arise the question of alternative formulae for sugar-containing preparations in the British Pharmacopoeia and the British Pharmaceutical Codex. Those who remember the efforts that were made during the last war to meet the sugar shortage by such formulae will realise how difficult it is to provide satisfactory substitutes for sugar. Sugar is not only a sweetening agent, it has also thickening and preservative properties and it is only when attempting to provide substitutes for its use in medicine that its value is fully appreciated. No one wishes to see a return to the use of unsatisfactory substitutes which were employed during the last war, and it rests primarily with medical practitioners to prevent such a contingency by limiting their prescribing of sugar-containing preparations to those cases where it is essential in the interests of efficient treatment. Pharmacists are being urged to play their part in bringing about a reduction in the use of sugar in medicines but, so far as prescribed medicines are concerned, they are in the hands of the medical practitioners in doing so.

The president points out that pharmacists should exercise equally strict economy in the use of sugar.

YOU NEED THIS BOOK!



You can order a copy from your usual wholesaler, or the postman will bring you a copy by return of post if you complete this coupon.

- ★ The elucidation of some abstruse medical term, the deciphering of a medical certificate or the meaning of some physiological reference, is almost a daily occurrence in the average pharmacy.
- ★ The many developments in the practice of medicine during the last few years make this book a necessity if you are to keep abreast of the times.
- ★ The Chemist's Dictionary of Medical Terms has been compiled primarily for the use of Chemists, and the edition now available is entirely new—not just a revision of an old book. The definitions, whilst concise, lose nothing in clarity, and the volume corresponds in a large degree to the more comprehensive works in use in the medical profession.
- ★ There can be no doubt about the usefulness of this book. It is a storehouse of information in concise form.

Published by **THE CHEMIST & DRUGGIST**
28 ESSEX STREET, STRAND, LONDON, W.C.2

Herewith enclosed please find.....value
.....for which please send.....copies
DICTIONARY OF MEDICAL TERMS

Name.....

Address.....

Whiffen

IODIDES BROMIDES ALKALOIDS

NICOTINIC ACID

CAMPHORSULPHONIC ACIDS & SALTS

ATROPINE METHYL NITRATE

CAMPHOR MONOBROMIDE

BROMOFORM

CAESIUM BROMIDE

WHIFFEN & SONS, LTD.
FULHAM, LONDON, S.W.6

Incorporating George Atkinson & Company, Est. 1654

TELEPHONE: FULHAM 0037

TELEGRAMS: WHIFFEN LONDON

Don't let
a good
trade go
begging!

Get this
showcard **FREE** now



*Now meat is scarce,
I need my **ADMIN**
more than ever!*

ADMIN FORTIFIES FOOD
AND EQUALS 3 TIMES ITS WEIGHT IN BEST STEAK

With meat rationing in, every owner is worried how to feed his dog—and in your own district that means nearly one family in three. ADMIN, the scientific food supplement, gives you a chance to get a profitable share of this business with a *bona fide* pharmaceutical product.

This showcard will be supplied free on request during the month of March with all orders for ADMIN totalling 10/- or over. The demand is going to last right through the war—for 1 oz. of ADMIN contains *as much protein nourishment as 3 oz. of raw fillet steak*. ADMIN also contains, in scientific balance, all the mineral salts and vitamins essential to a dog's well-being.

ADMIN is supplied in 6d. cartons (enough for a week), 1/6 cartons (a month's supply), and 7/6 tins (7 months). Trade terms—less 33½% and 5% monthly cash on the cartons, and less 20% and 5% monthly cash on the tins. A dozen small cartons and half a dozen large ones make up a 10/- order. Send in your order *now* and give ADMIN a show.

COOPER, MCDUGALL AND
ROBERTSON LTD.,
BERKHAMSTED, HERTS

